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FRANK M. SHANNON
JULY 1909

PROVINCIAL MUSEUM

—OF—

NATURAL HISTORY AND ETHNOLOGY.

VICTORIA, BRITISH COLUMBIA.

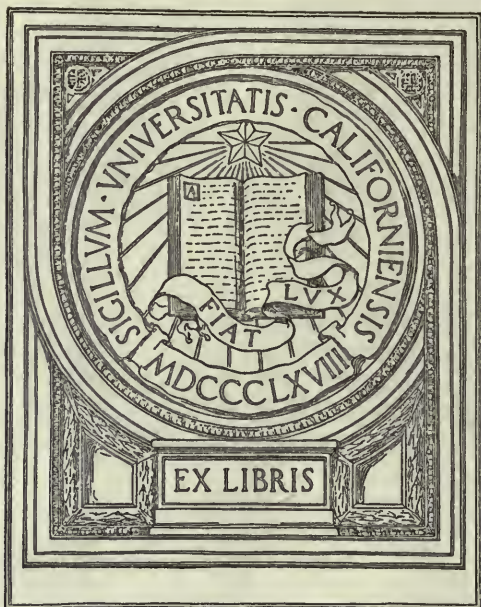


THE GOVERNMENT OF
THE PROVINCE OF BRITISH COLUMBIA

PRINTED BY
AUTHORITY OF THE LEGISLATIVE ASSEMBLY.

VICTORIA, B. C.:

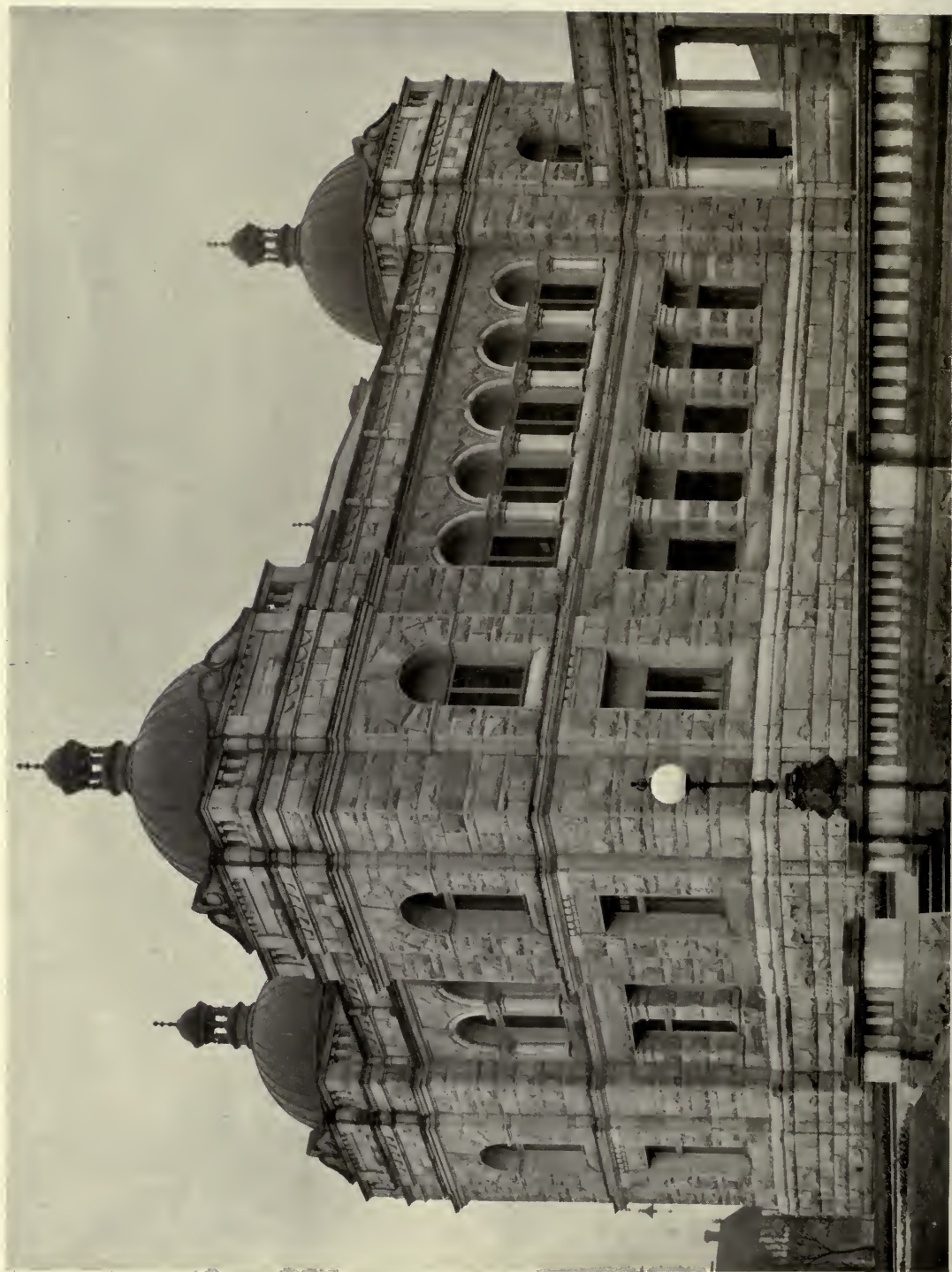
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1909.



COLLEGE OF AGRICULTURE
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1900.

The Honourable H. E. Young, M.D., LL.D.,
Provincial Secretary and Minister of Education,
Victoria, B.C.:

Sir,—I have the honour, pursuant to your instructions, to submit for your approval the following Visitors' Guide to the Natural History and Ethnological Collections in the Provincial Museum.

The economic importance of the knowledge concerning all forms of life is especially valuable in this Province, where the great bulk of our wealth is drawn directly from the hands of Nature, and there is reason to believe that the preparing of this Guide will greatly facilitate the study of animal life by our visitors, especially the young, whether pursuing systematic studies in Natural History and Ethnology, or from a desire to merely acquire casual information.

I have the honour to be,

Sir

Your obedient servant,

FRANCIS KERMODE,

Curator, Provincial Museum.

January 21st, 1909.

INTRODUCTION.

—:0:—



MUSEUM is an institution for the preservation of those objects which best illustrate Nature and the works of man, and the use of these for the increase of knowledge, and for the culture and enlightenment of the people; its special functions being to preserve and utilise objects of nature and works of art and industry. It supplies a need which is felt in every intelligent community and which cannot be supplied by any other agency; it does not exist except among highly enlightened peoples, and obtains its highest development only in great centres of civilisation, and is a necessity in every highly civilised community. The growth of a Museum from day to day may seem to be small, but the growth from year to year may be very large, so during the past it has often seemed as if little was being accomplished, whereas the last five years, taken as a whole, have been the most fruitful in the history of the Museum. During the last ten years the specimens in the Museum have, under the energies of the late John Fannin, and the present Curator, Frank Kermode, been practically renewed, while during the last five years many valuable additions have been made, notably: Fannin's Mountain Sheep (*Ovis fannini*, Hornaday); Stone's Mountain Sheep (*Ovis stonei*, Allen); and Kermode's White Bear (*Ursus kermodei*, Hornaday), captured in May, 1904, at Gribbel Island.

The visitor, looking at the various animals and then at the labels, is almost lost in wonder at the immense distances from which the specimens were obtained, some possibly at great risk of danger to the life of the hunter, who has to be a sure shot, and have a keen eye and strong nerve to attack, for instance, a Grizzly Bear.

If in your travels you should visit Victoria, Vancouver Island, be sure you see the Provincial Museum. You will there see many strange and wonderful things, and if you have time to listen, stories will be told you, woven about these "Exhibits," that will make your

visit a not-to-be-forgotten pleasure. Do you care for the glories of the chase? Go into the great hallway devoted to British Columbia's big game, and learn from the Curator the history of the Giant-Moose, the Caribou and the Bear. Are you a lover of the weird and mysterious? The Indian legends told on the many totems here brought together would, if written down, fill a series of large volumes by themselves. Would you read from the fossils the history of successive periods since the world was young? The page is open to your gaze. Are you expert with the rod? If so, you will be glad to hear the truly "big fish" stories the Curator can tell you. Care you to know the extent of British Columbia's mineral, or fishery or forest wealth? Ask questions and examine specimens.

It was on the 2nd of December, 1886, that the Museum was formally opened up in a room 20x12, with no workshop attached. The Curator, Mr. John Fannin, was simply told that he must make the most of it until better quarters were provided, and for the first three years of the Museum's life nearly all the work was done at Mr. Fannin's private rooms after the Museum closed for the day. On the 24th of May, 1889, the Museum was removed to the Old Supreme Court Building, and the work of building up the institution commenced in real earnest. Gradually, but surely, the development of the Museum advanced until again the accommodation was totally inadequate. Then, in 1898, it was moved to its present quarters in the eastern section of the Parliament Buildings; but it has outgrown these premises, and there should be erected now a building, twice as large and specially designed for Museum purposes; and until such a house is secured, the perfection of the collection must naturally be retarded.

The Provincial Museum (being essentially a British Columbia Museum) necessarily contains only those specimens obtained within its borders, hence none of them were procured by exchange with other parts of the Continent, so that the value of a collection so truly local in its formation is incalculable.

The collection is worthy of a large building, and is a credit not only to the Government under whose direction it is managed, but to the people of the Province, whose individual efforts have done so much to assist its growth in the way of contributions, as very many specimens now in the Museum have been presented by friends to the institution from every portion of the Province.



SILVER FOX, *VULPES FULVUS ARGENTATUS* (SHAW).
Group in Provincial Museum, Victoria, B. C.

The Ethnological Collection contains over fifteen hundred specimens of the skill of the natives of this Province, and illustrates the common life of them from a remote past, the age of which we have no means of ascertaining, up to the introduction of European manufactures and implements, and the consequent disappearance of the older arts. The advent of iron, steel and brass appears to date from about one hundred years ago or even earlier, and was probably followed for some time by an improvement in wood carving, such as may be expected from the use of sharper tools. This collection is another department where much requires to be done, and that quickly. Every day increases the difficulty and cost of procuring relics of the fast disappearing original occupants of the land, where legends told of many totem poles are as curious and deeply interesting as any histories of bygone nations can be. Though in the midst of a collection area unrivalled in the world, little is being done, or has been, to take advantage of the golden opportunity of the present. The collection, although incomplete, is at the same time a most interesting study, embracing as it does some relics of almost every known Indian tribe of British Columbia, either extinct or still existing. The jade implements are especially deserving of attention, as well as one piece of jade weighing upwards of twenty-five pounds, no doubt the largest specimen ever found on the Pacific Coast.

The grouping of mammals and birds, which is now the principal feature in all Museums, has been initiated here, and groups shown with their natural surroundings, at a glance teach a person as to their habits and life history. The Museum contains good collections, embracing, as it does, many fine and rare specimens.

The Ornithological, or Bird Collection, too, is admirable and complete, not only every familiar feathered friend being met with, but specimens being on view of birds entirely new to British Columbia, if not to the Pacific Coast; and the Museum Collection intelligently read offers incontrovertible evidence of the constantly changing distribution of the birds of the world.

The fishes of the Province are fairly well represented, both in alcoholic specimens and gelatine casts, the latter method being now almost entirely employed in representing the fishes, and so far with satisfactory results. The fish of British Columbia waters offer a very varied list of specimens from the Smelt (*Osmerus thaleichthys*, Ayres) to the Halibut (*Hippoglossus vulgaris*, Fleming). Here we

have a Tyhee or Spring Salmon (*Oncorhynchus tshawytscha*, Walbaum), weighing seventy pounds, caught in Campbell River with rod and line. Then there is the Kamloops Trout (*Salmo gairdneri kamloops*, Jordan), a truly fine, big fish. Then we have the Hand-saw fish (*Alepisaurus borealis*, Gill), a peculiar long and narrow fish; also the Oolachan or Candle fish (*Thaleichthys pacificus*, Richardson). This fish is so naturally oily that when dried it is used as a candle by the Indians. This is followed by an immense White Sea Bass (*Cynoscion nobilis*, Ayres); then comes the Ribbon fish (*Eques lanceolatus*, Linnæus). This fish was caught in fish traps at Sherringham Point in 1907. It is an interesting fish of a beautiful and singular colouration, resembling that of a chaetodont and is some six feet in length; also the Californian Bonito (*Sarda chilensis*, Cuvier and Valenc.), taken at Rivers Inlet, B.C.; then the Chub Mackerel (*Scomber colias*, Gmelin). This is the Spanish Mackerel of England, is widely distributed north to England, Maine and San Francisco, very common in the Mediterranean and in Southern California, smaller than the common mackerel and inferior to it, although a food-fish of importance; then the California Barracuda (*Sphyrna argentea*, Gaird), a long and slender fish, an important food-fish with flesh rich, firm and delicate—a southern fish. Next comes the Prow fish (*Zaprora silenus*, Jordan); this is the type, there having been two caught and both of them in our waters. These are the only two known, a very curious fish indeed. In fact we might go on enumerating the different species that are to be obtained in our waters indefinitely.

The Crustacea Collection contains most of the larger species of British Columbia. Some of the crabs are grotesquely ornamented with spines and knobs, and others, when alive, were even more strongly decorated with sea-weeds and zoophytes to conceal them from their enemies. The “stone” crabs are especially well represented, including the large so-called “king” crab and small “turtle” crab, which is so hidden by its shell that none of its legs are visible from above when it withdraws them. Many of the small Crustacea have yet to be collected. Star fish and sea urchins are well represented in the collection which also contains some exceedingly rare and remarkable specimens.

Of Sea-weeds or Marine Algae there are about one hundred specimens; also some sponges.



KERMODE'S WHITE BEAR. *URSUS KERMODEI* (HORNADAY).
(Type Specimen.) Group in Provincial Museum, Victoria, B. C.

Although the Shell Collection is a fine one, the Museum is in lack of land and fresh water species from the whole Province.

It must be premised that the collection of fossils is in its infancy; the first glance will show the truth of Sir A. Geikie's statement, that marine mollusca form the alphabet of Palæontology, the science treating of the forms of animal life in the rocks of the earth's crust. The first animal remains to be mentioned, however, belong to the vertebrates, and are believed to have lived during the existence of the Glacial period of our history. Then we have also several mammoth teeth, mostly found in the Province, and almost without doubt belonging to the hairy mammoth. Marine shells of the ice age are shown from Comox, Sucia Islands and Victoria. The Pliocene system, or the most recent tertiary, is represented by a small collection from sea cliffs near Sooke. Near these shells is a formation containing brown or soft coal, the layers exposed on the beach being mostly water-worn logs perforated by teredo. To the Miocene period belongs the collection of fossil shells from Carmanah Point, at the entrance to the Straits of Fuca. The specimens are, with few exceptions, identical with those found in rocks of similar character at Astoria, on the Columbia River. The Cretaceous period containing the productive coal measures of Vancouver Island and the Queen Charlotte Islands is not marked off from the Eocene tertiary by any great break. The plant remains are essentially similar, and the trees which flourished at the same time as the vegetation forming the coal we now use as fuel, belonged to such recent orders as the poplar, birch, elm, oak and willow, together with a palm (*Sabalimperialis*) and several ferns. Nanaimo, Comox, Sucia, Hornby Islands, Cumshewa and Skidegate are the richest and most accessible localities for fossils of this time and there are here numerous species from each place. According to the ordinary classification the Secondary Age may now be left for the Primary or Palæozoic. Rocks of this age have been distinguished by means of their fossils at various places on Vancouver Island and Mainland. It is supposed that the hard crystalline diorites and limestone of Vancouver Island, and the Coast Range of the Mainland, are composed of materials belonging to the carboniferous system, as fossils have been found at Horne Lake and the Ballinac Islands, indicating this to be the fact. The Cambrian period is represented by fossils from Mount Stephen in the Rocky Mountains. At this place exists one of the most interesting assemblages of organisms yet found in the Province,

for excepting some obscure organic remains obtained from earlier strata, they are the earliest forms of life yet discovered in the world's history.

The Entomological collection is both valuable and instructive. Here you will find types of many species discovered on Vancouver Island and the Mainland; and the butterflies, moths and beetles form a very inspiring sight, arranged, as they are, scientifically according to classification.

At the taxidermists laboratory many mammals and birds were finished last year, including some fine groups in cases.



BLACK-TAILED DEER. *ODOCOILEUS COLUMBIANUS* (RICH.).
Group in Provincial Museum, Victoria, B. C.

ENTRANCE HALL.

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Here we find three Indian totem or heraldic poles. The one on the right of door as you enter is the giant cedar (*Thuja gigantea*), carved and painted in red and black. Of the three figures represented the upper and principal one is a raven. The middle of the pole was cut away below to provide a doorway for the house in front of which it stood. This is from Bella Bella.

The next on the right is a totem pole made of giant cedar, carved and painted to represent various figures. This formerly stood at the back of "The house which chiefs peep at from concealment" (feeling their inferiority), at Skidegate, Queen Charlotte Islands. It belonged to the chief "Though younger brother must be obeyed," of the "Rotten House" division of the Eagles of Skidegate, and shows some of his principal crests. The upper figure is a raven with two frogs hanging from its mouth, and below it is the mythical mountain hawk.

The pole faced the door of the house in front of which, outside, stood the high pole which showed not only the crest of the chief, but also his wife's. At the top are three small male figures wearing high-crowned hats, then comes the raven with dog-fish below it, both eagle crests; and at the bottom is a killer-whale which belonged to the wife, who was of the raven division.

Then following around the wall, in the next corner, is a heraldic house pole, which formerly stood at the back of "The house so large that people must shout to make themselves heard in it."

This belonged to Chief Nestakana, of the "Great House" division of the Eagles of Skidegate, Queen Charlotte Islands, and shows two of his crests. ✓

The upper figure is the raven with its beak broken and bent down, as told in one of the stories of its adventures; and below is a whale. The smaller figures are used to fill up space ornamentally.

On the high pole at the entrance are also shown two of the chief's crests; the raven above and the dog-fish next. At the bottom is a grizzly bear, a crest of his wife who belonged to the principal raven family of Skedans.



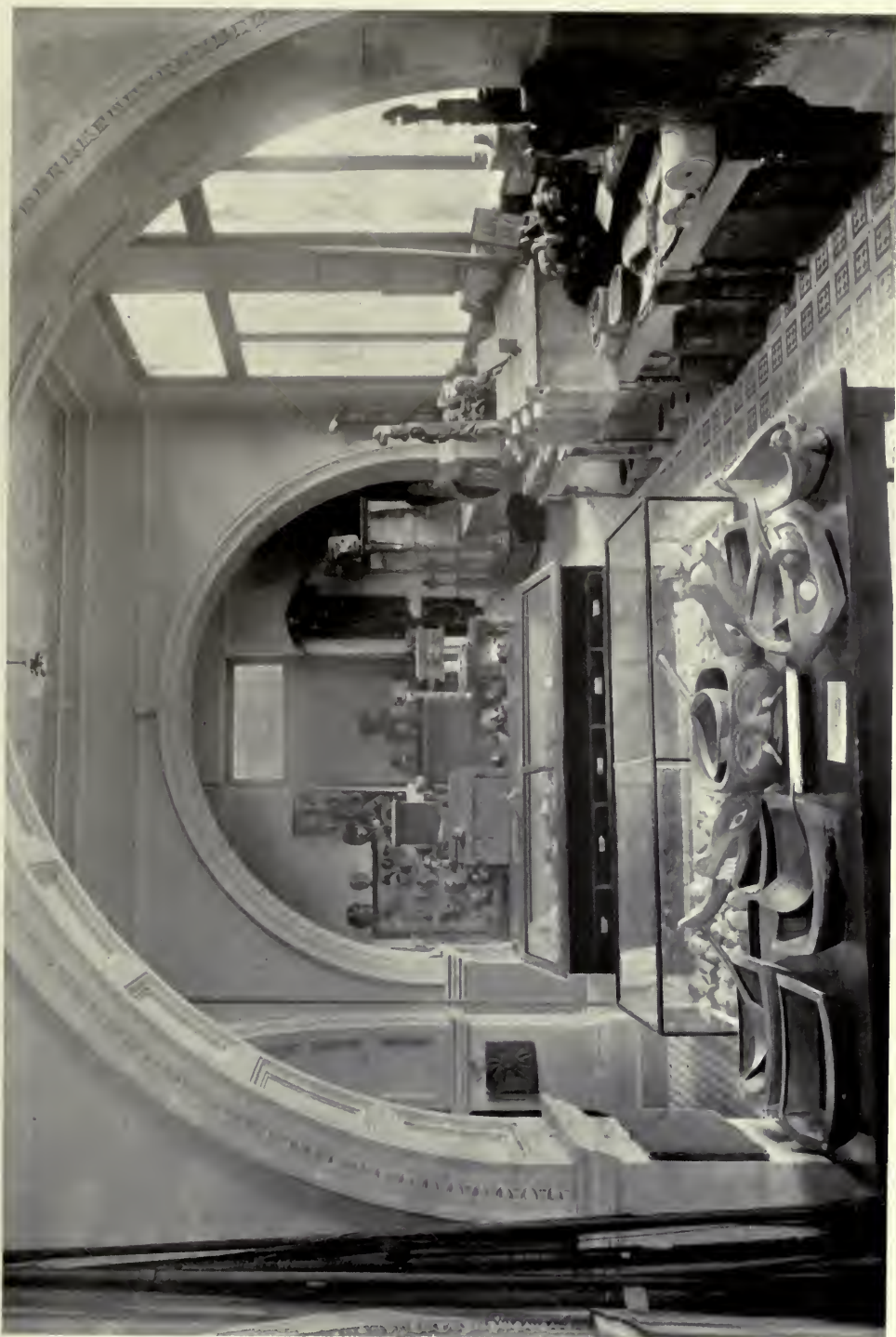
HERALDIC OR TOTEM POLE (No. 1).



HERALDIC OR TOTEM POLE (No. 2).

The next is the figure of the man who first brought copper to the Indians. The man is standing with a piece of copper, painted in a totemic design, in his arms. He is wearing a chief's hat with two extra crowns. This is also made of giant cedar and is from Bella Bella.

There are three or four raven masks, with movable jaws, used in dancing. They are also from Bella Bella.



ETHNOLOGICAL DEPARTMENT.

MAMMALS.

— :o: —

Entering the Museum on the left are seen various kinds of deer.

Moose (*Alce gigas*, Miller).

Of all the big animals of the North, the "Giant" Moose appeals most strongly to the imagination of everybody in general, and to the sportsman in particular. It is truly the colossus of the North.

American Elk "Wapiti" (*Cervus canadensis*, Erxleben).

Look at its majestic head, crowned by a pair of mighty antlers! This animal is distributed over the south-eastern portion of the Mainland, the West Coast of Vancouver Island, in the Comox District, and to the Northward.

Mountain Caribou (*Rangifer montanus*, Thompson-Seton).

Found in the Algash Mountains and White Cap Mountains; a grand bull, and its cow and calf. They range throughout the entire Mainland, from the Southern to Northern Boundary.

Osborn's Caribou (*Rangifer osborni*, Allen).

Found in the Atlin District, and headquarters of the Stikine River.

Queen Charlotte Caribou (*Rangifer dawsoni*, Thompson-Seton).

Found at Virago Sound, Graham Island, of the Queen Charlotte Islands. Caribou, in a state of nature, live on "Reindeer moss," tree-moss, and lichens, and they love ice-covered lakes and ponds as much as any boy. Their loose-jointed and wide-spreading hoofs and enormously developed "dew-claws" have been specially designed by Nature to enable these animals to run freely, as if on snow-shoes, over snow which to any small-hoofed deer would be quite impossible.



MAMMALS IN PROVINCIAL MUSEUM, VICTORIA, B. C.



MAMMALS IN PROVINCIAL MUSEUM, VICTORIA, B. C.

Mule Deer (*Odocoileus hemionus*, Rafinesque).

This fine animal is universally known throughout the Rocky Mountain region, which constitutes its home. In Manitoba this animal is called the "Jumping Deer," because, when running at a gallop, it makes a series of stiff-legged jumps or "bucks" of great length. To anyone who sees this gait for the first time it is quite astonishing. When it dashes out of a clump of stunted cedars, and goes flying down the crest of a bare ridge, it bounds past in full view for a quarter of a mile, reaching out with its fore-feet, but for each leap it springs into the air with stiffened legs and goes bounding forward as if the ground were an indiarubber cushion that throws it upward and forward every time it touches it with its feet. In reality its knees do bend a trifle just as its feet touch, to lift his body upward again, while its strong hind-legs thrust it forward.

Having now reached the end of the mammals on the left we cross over to the right, and here we find a case containing a group of

Black-tailed Deer (*Odocoileus columbianus*),

in a snow-scene with a painted background. These specimens were obtained at Englishman's River, Vancouver Island, B.C., November, 1907. They range west of Cascades from Washington to Alaska, including all the larger islands except the Queen Charlotte Group.

White-tailed Deer (*Odocoileus virginianus*).

It ranges through the southern portion of the Province, east of the Cascade Mountains.

American Panther (*Felis concolor*, Linn).

Known also by the following names:—Cougar, California Lion, Puma and Mountain Lion. They are common on Vancouver Island and lower portion of the Mainland.

Bank Beaver (*Aplodontia rufa*, Rafin).

It ranges east of Cascades, west along the Fraser to Chilliwhack.

Beaver (*Castor fiber*, Linn).

Range: The greater portion of the Mainland and Island.

Western Porcupine (*Erethizon epixanthus*, Brandt).

It ranges the Mainland at large.

Then follows a case of small mammals, among which we find Minks, Skunks, Moles, Rats, Mice and Bats, etc., truly a heterogeneous lot. Among them will be seen the Jumping Mouse (*Zapus trinotatus*).

Raccoons (*Procyon lotor*, Linn).

These animals are somewhat clumsy and deliberate in their movements as compared with the majority of the wood-dwellers. Their thick fur enables them, like the bears, to rifle bee-trees in comparative safety, and to dig bumble-bees and hornets out of the turf. They are here shown feeding in a wild crab-apple tree.

White Goat, or Antelope Goat (*Oreamnos montanus*, Ord),

It is found on nearly all the mountains of the Mainland, its abundance centreing along the summit of the Coast Range.

Dall's Mountain Sheep (*Ovis dallii*, Nelson), ram and ewe.

These were obtained at Cook's Inlet; its range is North-West British Columbia and Alaska. Then follows type specimen of

Fannin's Mountain Sheep (*Ovis fanninii*, Hornaday).

This fine sheep was taken near Dawson City, North-West Territories, and ranges through into the Atlin District, B.C. The next case contains a pair of

Black Bears (*Ursus americanus*, Pallas).

Taken at Sooke, Vancouver Island, and Bridge River. It ranges throughout the whole of British Columbia, and is to be found very plentiful in the fall of the year along the banks of the rivers feeding on salmon that die by the thousands after spawning or on the way to the spawning ground. These are followed by the

Queen Charlotte Black Bear (*Ursus carlotte*, Osgood).

It is from Skidegate, Queen Charlotte Islands.

Kermode's White Bear (*Ursus kermodei*, Hornaday).

This new type specimen was captured at Gribbel Island, B.C., in May, 1904, and now the species is represented by a group of five specimens. Then passing up the next aisle, to the right, we find a case of



RACCOON. *PROCYON LOTOR* (LINN.)
Group in Provincial Museum, Victoria, B. C.

Hoary Marmots (*Arctomys caligatus*, Esch).

Taken at Lillooet, B.C. They range Vancouver Island and Mainland.

Coyote, Prairie Wolf (*Canis latrans*, Say).

To be found on the Mainland, east of Cascades. Next we come to a case containing a model of a

Killer Whale (*Orca pacifica*).

It is a young one, and was taken from its mother, which was found drifting near Trial Island.

Bay Porpoise (*Phocaena vomarina*, Gill).

Taken in the Straits of Georgia. Then comes a case containing a group of

Stone's Mountain Sheep (*Ovis stonci*, Allen), ram, ewe and lamb.

They were taken at the head-waters of the Iskoot River, B.C., in 1905. Turning to the right here, and following down on the left, we have a case containing a fine group of

Big-horn Mountain Sheep (*Ovis canadensis*, Shaw), male and female, with two lambs.

These range the mountains of the Mainland, except the Coast Range, from Kootenay to Cassiar, and have been taken at Cassiar, Similkameen, Bridge River and Chilcotin. These are followed by a

Raccoon (*Procyon lotor*, Linn).

Ranges the coast line of the Province.

American Badger (*Taxidea americana*, Zimm).

Taken at Okanagan.

Mink (*Lutreola vison*, Briss).

Ranges the Island and Mainland, east and west of Cascades.

Sea Lion (*Eumetopias stelleri*, Less),

Taken in a salmon trap, near Point Roberts, B. C., September 1897. This animal ranges from the southern coast of Vancouver Island to Alaska.

Hair Seal (*Phoca vitulina*, Linn).

Group taken at Khutze Inlet.

Fur Seal (*Callorhinus ursinus*, Linn). Group.

These valuable fur-bearing animals migrate in great numbers along our Pacific border to Alaska.

Land Otter (*Lutra canadensis*).

Range: The Island and Mainland, east and west of Cascades.

Pacific Walrus (*Odobænnus obsus*, Allen).

Comes from Icy Cape, Alaska.

Grizzly Bear (*Ursus horribilis*, Ord).

Taken at Revelstoke, B.C., and which ranges over the whole of the Mainland from the Coast to the Rocky Mountains.

Grey Wolf (*Canis occidentalis*, DeKay).

Found at Sooke, Vancouver Island, and common throughout the whole Province.

Dusky Wolf (*Canis occidentalis*, DeKay var *nubilus*).

Taken at Clinton, B.C.

Then comes a case with a Silver Fox just about to jump on to a rabbit. On the other side of the stairs is a fine

Musk Ox (*Ovibos moschatus*, Zimm).

Found in the barren grounds of Northern Canada.

Common Lynx (*Lynx canadensis*, Kerr).

Taken at Grand Prairie, B.C. Ranges over the Mainland at large.

Bailey's Lynx (*Lynx baileyi*).

Ranges the southern portion of the Mainland, east of the Cascade Range.

Wild Cat (*Lynx rufa*).

Ranges the Mainland, west of the Cascades.

Upstairs we have the Ornithological Collection. In the first case there is the

ORDER PYGOPODES. · DIVING BIRDS.

FAMILY PODICIPEDIDÆ. GREBES.

ÆCHMOPHORUS. (Coues).

Western Grebe (*Æchmophorus occidentalis*, Lawr).

This is a remarkable Grebe, the largest of this country, and one requiring comparison with no other for its determination. It is a fine-looking bird on the water, has a trim and shapely aspect, like a clipper-ship. They are not shy, and have great power of diving. It is an abundant resident throughout the Province, and a winter resident along the Coast, where in some localities, such as Howe Sound and Burrard Inlet, it appears in great numbers. We have four other Grebes in British Columbia, they are the

COLYMBUS. (Linnaeus).

American Red-necked Grebe, Holboell's Grebe (*Colymbus holbælli*, Reinh).

A common winter resident along the coast of Vancouver Island and Mainland. Winter resident on Okanagan Lake.

Horned Grebe (*Colymbus auritus*, Linn).

A common winter resident on the Coast, and very common in the Straits, near Victoria, in April. Breeds on the lakes from Okanagan to Dease Lake.

***American Eared Grebe** (*Colymbus nigricollis californicus*, Heerm).

Taken at Kamloops. Found breeding on lakes at Kamloops.

PODILYMBUS. (Lesson).

Pied-billed Grebe (*Podilymbus podiceps*, Linn).

Common resident on Vancouver Island and Mainland. It breeds on lakes close to Victoria and throughout B.C. generally.

FAMILY GAVIIDÆ. LOONS.

GAVIA. (Forster).

Great Northern Diver, Loon (*Gavia imber*, Gunn).

The skin of the Loon is used in Russia to make caps for the head and clothing, etc. Garments made of these are very warm, never

imbibing the least moisture, and are more lasting than could be imagined. These birds build their nests at the edge of small islands or margins of lakes or ponds; they lay only two eggs, and it is very common to find only one pair and their young in one sheet of water; a great proof of their aversion to society. Found throughout the Province; an abundant resident.

Black-throated Loon (*Gavia arcticus*, Linn.).

Taken at Burrard Inlet.

Pacific Loon (*Gavia pacificus*, Lawr.).

Taken at Comox, Chilliwack and Victoria.

Red-throated Loon (*Gavia lumme*, Gunn.).

Taken at Esquimalt Harbour, West Coast of Vancouver Island and Chilliwack.

FAMILY ALCIDÆ. AUKS, MURRES, and PUFFINS.

LUNDA. (Pallas).

Tufted Puffin (*Lunda cirrhata*, Pall.).

Common along the coast of Vancouver Island, Queen Charlotte Islands and Mainland, and on Bare Island, near Sidney, B.C. Breeds throughout its range.

FRATERCULA (Brisson).

Horned Puffin (*Fratercula corniculata*, Naum.).

Rare at Masset, Queen Charlotte Islands.

CERORHINCA. (Bonaparte).

***Rhinoceros Auklet** (*Cerorhinca monocerata*, Pall.).

Coast of Vancouver Island and Mainland. Breeds on Islands, in Gulf of Georgia.

PTYCHORAMPHUS. (Brandt.).

***Cassin's Auklet** (*Ptychoramphus alcuticus*, Pall.).

Entire coast line of the Province and West Coast of Vancouver Island.



BLACK BEAR. *URSUS AMERICANUS* (PALLAS).
Group in Provincial Museum, Victoria, B. C.

SYNTHLIBORAMPHUS. (Brandt).

Ancient Murrelet (*Synthliboramphus antiquus*, Gmel).

Not common. West Coast of Vancouver Island and in the Straits, near Victoria.

BRACHYRAMPHUS. (Brandt).

Marbled Murrelet (*Brachyramphus marmoratus*, Gmel).

An abundant resident along the coast of British Columbia and Queen Charlotte Islands. Breeds on Vancouver Island and some of the smaller islands in the Gulf of Georgia and along many of the inlets of the Mainland.

CEPPHUS. (Pallas).

Pigeon Guillemot (*Cephus columba*, Pall).

An abundant resident along the coast from Race Rocks to Alaska, and quite common in Skidegate Inlet, Queen Charlotte Islands.

URIA. (Brisson).

California Murre, Guillemot (*Uria troile californica*, Bryant).

A resident along the coast of Vancouver Island and Mainland. Breeds on West Coast of Vancouver Island.

ORDER LONGIPENNES. LONG-WINGED SWIMMERS.

FAMILY STERCORARIIDÆ. SKUAS and JÆGERS.

STERCORARIUS. (Brisson).

Pomarine Jaeger (*Stercorarius pomarinus*, Temm).

Taken near Victoria.

Long-tailed Jaeger (*Stercorarius longicaudus*, Vieill).

Sumas Lake.

Parasitic Jaeger (*Stercorarius parasiticus*, Linn).

Victoria and Comox, Vancouver Island.

FAMILY LARIDÆ. The GULLS and TERNS.

PAGOPHILA. (Kaup).

Ivory Gull, Snow Gull (*Pagophila alba*, Gunn).

Dease Lake, Cassiar; Okanagan Lake.

RISSA. (Stephens).

Pacific Kittiwake (*Rissa tridactyla pollicaris*, Ridgw).

Taken at Discovery Island and at Queen Charlotte Islands.

LARUS. (Linnæus).

Glaucous-winged Gull (*Larus glaucescens*, Naum).

An abundant resident on the Coast. Breeds on some of the islands in the Gulf of Georgia; also found at Okanagan Lake.

Point Barrow Glaucous Gull (*Larus barrovianus*).

Found at Comox.

Western Gull (*Larus occidentalis*, Aud).

An abundant resident on the Coast during the winter months. Taken at Chilliwack. Breeds in Similkameen Valley.

American Herring Gull (*Larus argentatus smithsonianus*, Coues).

An abundant resident on the Coast. It breeds in the interior of Mainland. Common at Metlakatla, Chilliwack and Okanagan.

California Gull (*Larus californicus*, Lawr).

A common winter resident on the Coast. Common in the Lower Fraser Valley and Okanagan Lake in winter.

Ring-billed Gull (*Larus delawarensis*, Ord).

Common along the coast of Vancouver Island and Mainland, and in winter at Okanagan Lake and Chilliwack. Breeds in the interior, especially to the northward.

Short-billed Gull (*Larus brachyrhynchus*, Rich).

Common winter resident along the coast of Vancouver Island and Mainland. Common in Lower Fraser Valley and on the lakes in the Cariboo District.

Heermann's Gull, White-headed Gull (*Larus hermanni*, Cass).

Common along the southern coast of Vancouver Island during July and August.

Bonaparte's Gull (*Larus philadelphia*, Ord).

An abundant resident throughout the Province, and found in great numbers about the inlets and rivers in March and April. It breeds in the interior of the Province.

XEMA. (Leach).

***Sabine's Gull** (*Xema sabinii*, Sab).

Okanagan Lake.

STERNA. (Linnaeus.)

Common Tern (*Sterna hirundo*, Linn).

West coast of Vancouver Island, Cowichan Gap.

Arctic Tern (*Sterna paradisica*, Brunn).

From Dease Lake, south to Okanagan Lake.

HYDROCHELIDON (Boie).

Black Tern. (*Hydrochelidon nigra surinamensis*, Gmel).

Not common. Sumas, Okanagan Lake, Burrard inlet, Fraser River and interior of Mainland.

ORDER TUBINARES. TUBE-NOSED SWIMMERS.

FAMILY DIOMEDEIDÆ. ALBATROSSES.

DIOMEDEA. (Linnaeus).

Black-footed Albatross (*Diomedea nigripes*, And).

West coast of Vancouver Island, Nanaimo, and on Queen Charlotte Islands.

Short-tailed Albatross (*Diomedea albatrus*, Pall).

Common near Cape Beale, Vancouver Island; but more abundant on the West Coast.

FAMILY PROCELLARIIDÆ FULMARS and SHEARWATERS.

FULMARUS. (Stephens).

Pacific Fulmar (*Fulmarus glacialis glupischa*, Stejn).

Taken at Chemainus and Victoria.

PUFFINUS. (Brisson.)

Black-vented Shearwater (*Puffinus opisthomelas*, Coues).

Not common. Albert Head, Vancouver Island.

Dark-bodied Shearwater (*Puffinus griscus*, Gmel).

Common during migrations on whole coast line of B. C.

Slender-billed Shearwater (*Puffinus tenuirostris*, Temm).

Common during migrations on whole coast of B. C.

OCEANODROMA. (Reichenbach).

Gray Fork-tailed Petrel (*Oceanodroma furcata*, Gmel).

Found along both coasts of Vancouver Island, but more common on the Pacific Coast.

Leach's Fork-tailed Petrel. White-rumped Petrel (*Oceanodroma leucorhoa*, Vieill).

West Coast of Vancouver Island.

ORDER STEGANOPODES. TOTIPALMATE SWIMMERS.

FAMILY PHALACROCORACIDÆ. CORMORANTS.

PHALACROCORAX. (Brisson).

White-crested Cormorant (*Phalacrocorax dilophus cincinnatus*, Brandt).

Common on both coasts of Vancouver Island and coast of Mainland from Race Rocks to Alaska.

Brandt's Cormorant, Pencilled Cormorant (*Phalacrocorax penicillatus*, Brandt).

Not common. Vancouver Island.



MAMMALS IN PROVINCIAL MUSEUM, VICTORIA, B. C.

Violet-green Cormorant (*Phalacrocorax pelagicus robustus*, Ridgw).

Abundant on both coasts of the Island; has been taken as far north as Port Simpson. Breeds on Islands close to Sidney Island.

FAMILY PELECANIDÆ. PELICANS.

PELECANUS. (Linnæus).

American White Pelican (*Pelecanus erythrorhynchos*, Gmel).

Not common. Sicamous, Alexandria Bridge, Tranquille, Comox, Chilliwhack and Okanagan.

California Brown Pelican (*Pelecanus californicus*, Ridgw).

Not common. Race Rocks and Sumas Lake.

ORDER ANSERES. LAMELLIROSTRAL SWIMMERS

FAMILY ANATIDÆ. MERGANSERS, DUCKS, GEESE and SWANS.

MERGANSER. (Brisson).

American Merganser (*Merganser americanus*, Cass).

Found throughout the Province. Taken on West Coast of Vancouver Island in May; also on Queen Charlotte Islands in July and on Okanagan Lake all winter.

Red-breasted Merganser (*Merganser serrator*, Linn).

The red-breasted Merganser inhabits most parts of the north of Europe on the continent and as high as Iceland; also in the Russian dominions about the great rivers of Siberia. It is said to be frequent in Greenland, where it breeds on the shores. The inhabitants often take it by darts thrown at it, especially in August, being then in moult. At Hudson's Bay, according to Hutchins, they come in pairs about the middle of June, as soon as the ice breaks up, and build soon after their arrival, chiefly on dry spots of ground on the islands; lay from eight to thirteen white eggs the size of those of a duck; the nest is made of withered grass and lined with down of the breast. An abundant resident.

LOPHODYTES. (Reichenbach).

Hooded Merganser (*Lophodytes cucullatus*, Linn).

This is also an abundant resident and more common than the last named species. Nests in holes of trees.

ANAS. (Linnæus).

Mallard (*Anas boschas*, Linn).

This is the original of the common domesticated duck which is so serviceable to man. Its flesh is in general and high estimation, and the ingenuity of man in every country where it frequents has been employed in inventing stratagems to overreach these wary birds and procure a delicacy for the table. It is an abundant resident. Breeds in almost every suitable portion of the Province.

CHAULELASMUS. (Bonaparte).

Gadwall, Gray Duck (*Chaulelasmus sterpera*, Linn).

Not common. Victoria, Chilliwack and Okanagan.

MARECA. (Stephens).

European Widgeon (*Mareca penelope*, Linn).

Rare. Victoria and Saanich.

American Widgeon (*Mareca americana*, Gmel).

A common winter resident on the coast. Found also in Chilliwack and Okanagan. Breeds on lakes above Clinton.

NETTION. (Kaup).

Green-winged Teal (*Nettion carolinensis*, Gmel).

Common throughout the winter near Victoria. Rare on Queen Charlotte Islands. Breeds in the interior of the Mainland.

QUERQUEDULA. (Stephens).

Blue-winged Teal (*Querquedula discors*, Linn).

Not common on the coast. Taken at Chilliwack.

Cinnamon Teal (*Querquedula cyanoptera*, Vieill).

A summer visitor in the interior of the Province. Taken at Chilliwack and Okanagan.

SPATULA. (Boie.)**Shoveller, Spoon-bill** (*Spatula clypeata*, Linn).

Common on Mainland; rarely met with on Vancouver Island. Taken in Lower Fraser Valley about Sumas Lake, and on Okanagan Lake.

DAFILA. (Stephens.)**Pintail, Sprigtail** (*Dafila acuta*, Linn).

This is one of the most elegant and graceful of our ducks, either on land or water, walking and swimming, with the long-pointed tail elevated and the thin, sinuous neck swaying in all directions. It is shy and vigilant, but owing to its habit of clustering close in groups about the margins of pools, where the reeds or bush-wood favour approach, it is sometimes slaughtered in numbers with ease; and if the gunner be ready with another barrel, additional birds may usually be procured as they fly off in a compact flock.

AIX. (Boie.)**Wood Duck** (*Aix sponsa*, Linn).

Not common. A summer resident on Island and Mainland. Taken at Chilliwack and Okanagan.

AYTHYA. (Boie.)**Red-head Pochard** (*Aythya americana*, Eyt).

A winter resident on the Coast, but nowhere common. Breeds on the Cariboo Road lakes.

Canvas-back Duck (*Aythya vallisneria*, Wils).

A winter resident on the Coast. Taken on Okanagan Lake and 108-Mile House. Breeds near 108-Mile House, Cariboo Road.

American Scaup Back, Blue-bill (*Aythya marila*, Linn).

Abundant on the Coast in winter. Breeds in the interior of Mainland.

Lesser Scaup Duck (*Aythya affinis*, Eyt).

Common on Vancouver Island. Common in Lower Fraser and found all winter on Okanagan Lake.

Ring-necked Duck (*Aythya collaris*, Donovan).

Not common on Vancouver Island. Common in Lower Fraser Valley, and found all winter on Okanagan Lake.

CLANGULA. (Leach).**American Gold-eye, Whistler** (*Clangula americana*, Faxon).

A common winter resident on the Coast. Taken at Chilliwack and Okanagan. Breeds in the interior of the Mainland.

Barrow's Golden-eye (*Clangula islandica*, Gmel).

Not common. It winters on the Coast. A few have been taken on Vancouver Island and at Okanagan. Plentiful on the lakes along the Cariboo Road during nesting season.

CHARITONETTA. (Stejneger).**Buffle-head, Butter-ball** (*Charitonetta albeola*, Linn).

An abundant winter resident on the Coast. Breeds in the interior of the Mainland. Common at Metlakatla.

HARELDA. (Stephens.)**Long-tailed Duck, Old Squaw** (*Harelda hyemalis*, Linn).

Common on the coast of Vancouver Island and Mainland. Taken at Chilliwack and at Metlakatla.

HISTRIONICUS. (Lesson).**Harelquin Duck** (*Histrionicus histrionicus*, Linn).

Common on the Coast. Taken at Bear River, Vancouver Island; and Chilliwack. Rare on Queen Charlotte Islands.

DENDROCYGNA. (Swainson.)**Fulvous Tree Duck** (*Dendrocygna fulva*, Gmel).

Taken at New Alberni, Vancouver Island.



BIG-HORN MOUNTAIN SHEEP. *Ovis canadensis* (SHAW).
Group in Provincial Museum, Victoria, B. C.

OIDEMIA. (Fleming).

American Black Scoter (*Oidemia americana*, Swains).

Not common. Taken at Victoria and Port Simpson. Fairly common at Metlakatla.

White-winged Scoter (*Oidemia deglandi*, Bonap).

An abundant resident and is found throughout the year on the Coast. Common at Metlakatla. Taken at Chilliwack and Okanagan.

Surf Scoter, Sea Coot (*Oidemia perspicillata*, Linn).

Abundant resident along the coast of Vancouver Island and Mainland. Found at Chilliwack and Okanagan. Common at Metlakatla.

ERISMATURA. (Bonaparte.)

Ruddy Duck (*Erismatura jamaicensis*, Gmel).

Not common on the Coast. Breeds on the lakes along the Cariboo road.

CHEN. (Boie.)

Lesser Snow Goose (*Chen hyperborea*, Pall).

A winter resident on the Coast.

Ross's Snow Goose (*Chen rossii*, Cassin).

Rare in British Columbia. Taken at Comox and Kuper Island.

ANSER. (Brisson.)

American White-fronted Goose (*Anser albifrons gambeli*, Hartl).

Abundant on the Coast in winter. Taken at Cowichan Lake, Sumas, and Okanagan Lakes, and at Metlakatla. Breeds both on Island and Mainland.

BRANTA. (Scopoli.)

● **Canada Goose** (*Branta canadensis*, Linn).

An abundant winter resident on the Coast. Breeds in the interior of the Mainland.

***Hutchin's Goose** (*Branta canadensis hutchinsii*, Rich).

Abundant in the spring and fall migrations, and winters on the Coast.

***White-cheeked Goose** (*Branta canadensis occidentalis*, Baird).

Taken at Chilliwack.

Cackling Goose (*Branta canadensis minima*, Ridgw).

Winter resident on the Coast. Taken at Elk Lake, near Victoria; also Chilliwack and Okanagan.

Brant (*Branta bernicla glaucogastra*, Brehm).

Taken at Comox, Vancouver Island.

Black Brant (*Branta nigricans*, Lawr).

An abundant winter resident on the Coast.

PHILACTE. (Bannister.)

Emperor Goose (*Philacte canagica*, Sevest).

Taken at Chemainus, Vancouver Island.

OLOR. (Wagler.)

Whistling Swan (*Olor columbianus*, Ord).

This bird breeds in the great marshes near the Yukon mouth. The eggs, two in number, vary from pure white to fulvous, as do the parents on the head and neck, apparently without regard to age. The eggs are usually in a tussock quite surrounded with water, so that the female must sometimes set with her feet in the water. They are usually laid about June 1st. In July the swans moult and cannot fly, and the Indians have great sport spearing them with bone tridents. They are very shy birds, and usually shot on the wing, or with a bullet. This species, if hung long enough, is tender, well-flavoured and excellent eating.

***Trumpeter Swan** (*Olor buccinator*, Rich).

Found at Sumas and Okanagan.

ORDER HERODIONES. HERONS, IBISES, Etc.

FAMILY IBIDIDÆ. IBISES.

PLEGADIS. (Kaup.)

White-faced Glossy Ibis (*Plegadis gaurauna*, Linn).

Only two specimens known to be taken in the Province; one at Sardis, B. C., the other at mouth of Fraser River.

FAMILY ARDEIDÆ. HERONS AND BITTERNS.

BOTACRUS. (Hermann.)

American Bittern (*Botaurus lentiginosus*, Montag).

When the Bittern is disturbed at his meditation he gives a vigorous spring, croaks at the moment in a manner highly expressive of his disgust, and flies off as fast as he can, though in rather a loose, lumbering way. He is very easily shot on the wing. Easily hit and dropping at a touch, even of fine shot. When winged he croaks painfully as he drops, and no sooner does he touch the ground than he gathers himself in defensive attitude to resent aggression as best he can. He fights well, and with more spirit and determination than he might be expected to show. He has a very ugly way of pointing his resistance with quick thrusts of his spear-like bill, capable of inflicting no slight wound on an incautious hand. It is common throughout the greater portion of the Province. Breeds both east and west of Cascades.

ARDEA. (Linnæus).

Great Blue Heron (*Ardea herodias*, Linn).

Wherever placed, on tree, bush or rock, the nest of the Heron is a large bed of twigs, more or less matted together with grasses and weeds, some two feet in diameter and about one-third as high. Two or three eggs are laid, they measure 2.50 by 1.50, and are rather narrowly elliptical, with both ends of about the same shape; the colour is a pale, dull, greenish-blue, varying in shade in different specimens, not always uniform over the same eggs. It is a common resident on the Coast and is quite common at Sumas Lake and Okanagan. Breeds throughout its range.

North-west Coast Heron (*Ardea herodias fannini*, Chapman).

This bird, named after the late John Fannin by Frank M. Chapman, is quite a common species found at Skidegate, Queen Charlotte Islands, during the month of August.

EGRETTE. (Forester).

Snowy Heron (*Egretta candidissima*, Gmel).

Rare in British Columbia. Two specimens collected at Burrard Inlet.

ORDER PALUDICOLAE. CRANES, RAILS, Etc.**FAMILY GRUIDÆ. CRANES.**

GRUS. (Pallas.)

***Little Brown Crane** (*Grus canadensis*, Linn).

The Little Brown Crane, when proceeding from one favourite resort to another or when migrating, flies high, and not infrequently their approach is heralded, before they are in sight, by their incessant whooping clamour. While feeding they are generally silent. Such ponderous bodies, moving with slowly beating wings, give a great idea of momentum from mere weight of force of motion without swiftness, for they plod along heavily, seeming to need every inch of their ample wings to sustain themselves. One would think they must soon alight fatigued with such exertion, but the raucous cries continue, and the birds fly on for miles, in Indian file, under some trusty leader, who croaks his hoarse orders, implicitly obeyed. Each bird keeps his place in the ranks, the advancing column now rises higher over some suspected spot, now falls along an open sandy reach, swaying meanwhile to the right or left; as it passes on the individual birds are blended in the hazy distance, till, just before lost to view the line becomes like an immense serpent gliding mysteriously through the air. It is common throughout the Province during migrations.

Sandhill Crane (*Grus mexicana*, Mull).

Common throughout the Province; it breeds in the interior of the Mainland. Numbers pass over Victoria in the spring and autumn migration.



STONE'S MOUNTAIN SHEEP. *OVIS STONEI* (ALLEN).
Group in Provincial Museum, Victoria, B. C.

FAMILY RALLIDÆ. RAILS AND COOTS.

RALLUS. (Linnæus.)

Virginia Rail (*Rallus virginianus*, Linn).

Tolerably common on Island and Mainland; breeds close to Victoria. Taken at Chilliwack and Okanagan.

PORZANA. (Vieillot.)

Carolina Rail (*Poranza carolina*, Linn).

Found on Vancouver Island and Mainland. Rare on Queen Charlotte Islands. Common east of Cascades.

FULICA. (Linnæus.)

American Coot, Mud-hen (*Fulica americana*, Gmel).

Not only is the Coot extensively and very generally dispersed over North America, but, unlike most water birds, its breeding range is almost equally wide. There is a regular migration in the spring and fall, when, in company with other water-fowls, most of the Coots are on their way to or from the rather northerly regions where they especially breed, only a few lingering in suitable places along the route to nest. Some birds leave the Province in the fall to winter in the south, penetrating into Mexico, the West Indies and Central America. The nest is said to be sometimes a floating one, moored to the stems of reeds, rising and falling with the tide. It is a common resident on Vancouver Island and Mainland. Breeds throughout its range.

ORDER LIMICOLÆ. SHORE BIRDS.

FAMILY PHALAROPODIDÆ. PHALAROPES.

CRYMOPHILUS. (Viellot.)

Red Phalarope (*Crymophilus fulicarius*, Linn).

Taken at Clover Point, Victoria.

PHALAROPUS. (Brisson.)

Northern Phalarope (*Phalaropus lobatus*, Linn).

Abundant along the coast of Island and Mainland in the spring and autumn. Taken at Chilliwack, Okanagan and Burrard Inlet.

STEGANOPUS. (Vieillot.)

Wilson's Phalarope (*Steganopus tricolor*, Vieill).

Found at Chilliwhack.

FAMILY SCOLOPACIDÆ. SNIPES, SAND-PIPERS, ETC.

GALLINGO. (Leach.)

Wilson's Snipe (*Gallinago delicata*, Ord).

Common throughout the Province, on Island and Mainland.
Breeds in interior.

MACRORHAMPHUS. (Leach.)

Long-billed Dowitcher, Red-breasted Snipe (*Macrorhamphus scolopaceus*, Say).

Tolerably abundant throughout the Province and West Coast of Vancouver Island. Taken at Chilliwhack and Metlakatla. The nest of this bird is a simple hollow in the ground in the centre of a marshy spot on the border of a lake, with scarcely any lining whatever—nothing in the shape of a nest to bring away.

MICROPALAMA. (Baird.)

Stilt Sandpiper (*Micropalama himantopus*, Bonap).

Taken at Chilliwhack.

TRINGA. (Linnaeus.)

Knot, Robin Snipe (*Tringa canutus*, Linn).

Abundant during migrations.

ACTODROMAS. (Kaup.)

Sharp-tailed Sandpiper (*Actodromas acuminata*, Horsf).

Taken at Masset, Queen Charlotte Islands.

Pectoral Sandpiper (*Actodromas maculata*, Vieill).

Taken along the Coast during migrations, at Chilliwhack and Okanagan.

Baird's Sandpiper (*Actodromas bairdii*, Coues).

Distributed along the coast of Vancouver Island and Mainland. Taken at Chilliwack and Okanagan, and at Clover Point, Victoria.

Least Sandpiper (*Actodromas minutilla*, Vieill).

Common along the coast of Island and Mainland. This little bird is one of several species that collectively inhabit all the world and resemble each other very closely.

PELIDNA. (Cuvier.)

Dunlin (*Pelidna alpina*, Linn).

Found at Comox.

Red-backed Sandpiper (*Pelidna alpina sakhalina*, Vieillot).

Common in the spring and autumn migrations along the coast of Island and Mainland; taken at Chilliwack.

EREUNETES. (Illiger.)

Semipalmated Sandpiper (*Ereunetes pusillus*, Linn).

Not uncommon in migration along the Coast. Taken at Chilliwack, Okanagan and Metlakatla.

Western Semipalmated Sandpiper (*Ereunetes pusillus occidentalis*, Lawr).

Abundant in the fall along the Coast. Taken near Victoria and Chilliwack.

CALIDRIS. (Cuvier.)

Sanderling (*Calidris arenaria*, Linn).

Not common. Several have been taken near Victoria, also at Chilliwack and Metlakatla.

LIMOSA. (Brisson.)

Marbled Godwit (*Limosa fedoa*, Linn).

The whole of British Columbia. Breeds chiefly west of Cascades. Taken at Port Simpson.

TOTANUS. (Bechstein.)

Greater Yellow-legs (*Totanus melanoleucus*, Gmel).

Common along the Coast in winter. Taken at Clayoquot, Chilliwack and Okanagan. Breeds around the lakes at Clinton.

Lesser Yellow-legs (*Totanus flavipes*, Gmel).

Tolerably common throughout the Province. Winters on Coast.
Taken at Chilliwack and Okanagan.

HELODROMAS. (Kaup.)**Solitary Sandpiper** (*Helodromas solitarius*, Wils).

Common.

Western Solitary Sandpiper (*Helodromas solitarius cinnamomeus*,
Brewster).

Taken at Chilliwack and Okanagan.

SYMPHEMIA. (Rafinesque.)***Western Willet** (*Symphemia semipalmata inornata*, Brewster).

Found at Clover Point, Victoria.

HETERACTITIS. (Stejneger).**Wandering Tatler** (*Heteractitis incanus*, Gmel).

Tolerably common along the coast of Vancouver Island and
the Mainland. Taken at Clayoquot and at Skidegate, Queen Char-
lotte Islands.

BARTRAMIA. (Lesson).**Bartramian Sandpiper** (*Bartramia longicauda*, Bechst).

Taken at Comox, Vancouver Island, and at 150-Mile House,
Cariboo Road.

TRYNGITES. (Cabanis).**Buff-breasted Sandpiper** (*Tryngites subruficollis*, Vieill).

Not common. Taken at Chilliwack.

ACTITIS. (Illiger).**Spotted Sandpiper** (*Actitis macularia*, Linn).

Found along the entire coast. Taken at Clayoquot, Vancouver
Island, and at Skidegate, Queen Charlotte Islands. Taken also at
Chilliwack and Okanagan.



FANNIN'S MOUNTAIN SHEEP, *OVIS FANNINII* (HORNADAY).
(Type Specimen.) Provincial Museum, Victoria, B. C.

NUMENIUS. (Brisson).

Long-billed Curlew (*Numenius longirostris*, Wils).

This bird is by no means confined to the vicinity of the water, but on the contrary is often seen on extensive, dry plains, where it feeds on various molluscs, insects and berries, which it deftly secures with its extraordinarily long bill. The length and curve of this member, measuring sometimes eight or nine inches in length, gives the bird a singular and unmistakable appearance, either in flight or when gathering its food. Its voice is sonorous and not at all musical; during the breeding season in particular its harsh cries of alarm resound when the safety of its nest or young is threatened. In the fall, when food is plenty, it becomes very fat and affords delicate eating. Rare on the Coast, but more common in the interior of the Mainland, south through the Okanagan.

Hudsonian Curlew (*Numenius hudsonicus*, Lath).

Not common on Island and Mainland. Taken at Clayoquot, Port Simpson and at Cadboro Bay, near Victoria.

FAMILY CHARADRIIDÆ. PLOVERS, Etc.

CHARADRIUS. (Linnaeus).

Black-bellied Plover (*Charadrius squatarola*, Linn).

Abundant during migration along the Coast. Taken at Chilliwack and Okanagan.

American Golden Plover (*Charadrius dominicus*, Mull).

Common on the Coast during migration. Taken at Chilliwack, Okanagan, Metlakatla and Port Simpson.

***Asiatic Golden Plover** (*Charadrius dominicus fulvus*, Gmel).

Found at Comox.

ÆGIALITIS. (Boie).

Kildeer Plover (*Ægialitis vocifera*, Linn).

Found throughout the Province. Taken at Chilliwack and Okanagan.

Semipalmated Plover (*Ægialitis semipalmata*, Bonap).

Not common. Taken on the West Coast of Vancouver Island at Ucluelet and Clayoquot; also at Cadboro Bay, Victoria.

FAMILY APHRIZIDÆ. SURF-BIRDS and TURNSTONES.

APHRIZA. (Audubon).

Surf-bird (*Aphriza virgata*, Gmel).

Not uncommon along the entire coast line of the Province. Taken at Clayoquot and Port Simpson.

ARENARIA. (Brisson).

Turnstone (*Arenaria interpres*, Linn).

Along the entire coast line, but not common. Taken at Port Simpson and Sidney Island; also Sumas Lake.

Black Turnstone (*Arenaria melanocephala*, Vig).

Common along the entire coast of the Province. Taken at Clayoquot, Skidegate, Queen Charlotte Islands, and near Victoria throughout the winter.

FAMILY HÆMATOPODIDÆ. OYSTER-CATCHERS.

HÆMATOPUS. (Linnaeus).

Black Oyster-catcher (*Hæmatopus bachmani*, Aud).

Abundant along the entire coast of Island and Mainland. Common at Skidegate, Queen Charlotte Islands. Breeds throughout its range.

ORDER GALLINAE. GALLINACEOUS BIRDS.

FAMILY TETRAONIDÆ. GROUSE, PARTRIDGES, ETC.

OREORTYX. (Baird).

Mountain Partridge (*Oreortyx pictus*, Dougl).

Common on Vancouver Island. Introduced from California.

LOPHORTYX. (Bonaparte).

California Partridge (*Lophortyx californicus*, Shaw).

Common on Vancouver Island. Introduced from California.

DENDRAGAPUS. (Elliot).

Sooty Grouse (*Dendragapus obscurus fuliginosus*, Ridgw).

Abundant west of Cascade Mountains, including Vancouver Island, Queen Charlotte Islands and all the larger Islands along the coast.

Richardson's Grouse (*Dendragapus obscurus richardsonii*, Dougl).

An abundant resident east of Cascade Mountains to Rocky Mountains.

CANACHITES. (Stejneger).

Franklin's Grouse (*Canachites franklinii*, Dougl).

An abundant resident throughout the wooded portion of the interior east of the Cascade Mountains from Okanagan to Cassiar.

BONASA. (Stephens).

Canadian Ruffed Grouse (*Bonasa umbellus togata*, Linn). . .

An abundant resident east of and including the Cascade Mountains. Taken at Chilliwack.

Gray Ruffed Grouse (*Bonasa umbellus umbelloides*, Dougl).

Rocky Mountain District, Soda Creek, Beaver Pass and Okanagan.

Oregon Ruffed Grouse (*Bonasa umbellus sabini*, Dougl).

An abundant resident on Vancouver Island and all the larger Islands on the coast and on the mainland west of Cascade Mountains.

LAGOPUS. (Brisson).

Willow Ptarmigan (*Lagopus lagopus*, Linn).

Northern portion of British Columbia. Dease Lake, Cassiar; Log Cabin, Atlin.

Rock Ptarmigan (*Lagopus rupestris*, Gmel).

Quite common at Atlin.

White-tailed Ptarmigan (*Lagopus leucurus*, Swains & Rich).

Ptarmigan may be said to be simply Grouse that turn white in winter. They are the only members of this family of birds in which

such a remarkable seasonal change of plumage occurs. All the Ptarmigan are Grouse of boreal or alpine distribution, only reaching sea-level in the higher latitudes, elsewhere confined to mountains. The present species is immediately distinguished from the rest by having the tail white at all seasons, as implied in its name. In winter this Ptarmigan is entirely snow-white, in summer the plumage is variegated with ochrey and tawny, in finely undulated patterns, much of the under parts, however, and wings, remaining white. The Ptarmigan feeds upon the leaves and stalks of various alpine plants, being particularly fond of those of a species of Cassia. It also lives largely upon insects, and in winter is said to subsist on the buds and leaves of the pines and firs. It is found on the summit of most mountains of the Mainland and snow peaks of Vancouver Island.

PEDICETES. (Baird).

Columbian Sharp-tailed Grouse. Prairie Chicken (*Pediacetes phasianellus columbianus*, Ord).

At one time an abundant resident east of Cascade Range through the southern portions of the Province. Common near Vernon.

CENTROCERCUS. (Swainson).

***Sage Grouse** (*Centrocercus urophasianus*, Bonap).

Found at Osoyoos Lake.

FAMILY PHASIANIDÆ. PHEASANTS.

PHASIANUS. (Linnæus).

Ring-necked Pheasant (*Phasianus torquatus*, Linn).

Abundant on Vancouver Island and in the Lower Fraser River Valley and other portions of the Mainland. Introduced from China, now thoroughly naturalised.

ORDER COLUMBAE. PIGEONS.

FAMILY COLUMBIDÆ. PIGEONS.

COLUMBA. (Linnæus).

Band-tailed Pigeon (*Columba fasciata*, Say).

A common summer resident in the south-western portions of the Province, including Vancouver Island.



GROUP REPRESENTING A SECTION OF BARE ISLAND, STRAITS OF GEORGIA, B. C.
The birds included are Tufted Puffins, Pigeon Guillemots, Glaucous-winged Gulls, and Violet-green Cormorants,
that nest on Bare Island during the months of June and July. Group in Provincial Museum, Victoria, B. C.

ECTOPISTES. (Swainson).

*Passenger Pigeon (*Ectopistes migratorius*, Linn).

ZENAUDURA. (Bonaparte).

Mourning Dove (*Zenaidura macroura*, Linn).

Not common on Vancouver Island. Common in the Okanagan.
Taken at Chilliwack and Metlakatla.

ORDER RAPTORES. BIRDS OF PREY.

FAMILY CATHARTIDÆ. AMERICAN VULTURES.

CATHARTES. (Illiger).

Turkey Vulture (*Cathartes aura*, Linn).

Tolerably common on Vancouver Island and Mainland. Taken
at Chilliwack and Okanagan.

GYMNOGYPS. (Lesson).

*California Vulture (*Gymnogyps californianus*, Shaw).

Found at mouth of Fraser River.

FAMILY FALCONIDÆ. FALCONS, HAWKS, EAGLES, ETC.

CIRCUS. (Lacépède).

Marsh Hawk (*Circus hudsonius*, Linn).

Common on Vancouver Island and Mainland. Taken at Chilliwack and Okanagan.

ACCIPITER. (Brisson).

Sharp-shinned Hawk (*Accipiter velox*, Wils).

Abundant on Vancouver Island and portions of the Mainland.
Taken at Chilliwack and Okanagan.

Cooper's Hawk (*Accipiter cooperii*, Bonap).

Found on Vancouver Island and Mainland. Taken at Sicamous,
Chilliwack and Okanagan.

American Goshawk (*Accipiter atricapillus*, Wils).

Rather common in interior of Province. Taken on Vancouver
Island, Chilliwack and Okanagan.

Western Goshawk (*Accipiter atricapillus striatulus*, Ridgw).

Common throughout the Province. Taken at Skidegate, Queen Charlotte Islands.

BUTEO. (Cuvier).

Western Red-tailed Hawk (*Buteo borealis calurus*, Cass).

An abundant resident on Vancouver Island and Coast of Mainland. Taken at Chilliwack and Okanagan. Rare at Masset, Queen Charlotte Islands.

***Red-bellied Hawk** (*Buteo lineatus elegans*, Cass).

Burrard Inlet and Chilliwack.

Swainson's Hawk (*Buteo swainsoni*, Bonap).

Not common on Vancouver Island. Taken at Victoria, Union, Chilliwack and Okanagan.

ARCHIBUTEO. (Brehm).

American Rough-legged Hawk (*Archibuteo lagopus sancti-johannis*, Gmel).

Not common. Found on Vancouver Island and Mainland. Taken at Chilliwack and Okanagan.

AQUILA. (Brisson).

Golden Eagle (*Aquila chrysaetos*, Linn).

Found throughout the entire Province. Rare on Vancouver Island. A resident.

HALLÆTUS. (Savigny).

Bald Eagle (*Haliaeetus leucocephalus alascanus*, C. H. Townsend).

An abundant resident throughout the entire Province, on Island and Mainland. Common on Queen Charlotte Islands. Breeds throughout its range.

FALCO. (Linnaeus).

White Gyrfalcon (*Falco islandus*, Brün).

Saanich, Vancouver Island.

Gyrfalcon (*Falco rusticolus gyrfalco*, Linn).

Taken at Comox and Chilliwack.

Prairie Falcon (*Falco mexicanus*, Schleg).

Taken at Chilliwack and Kamloops.

Duck Hawk (*Falco peregrinus anatum*, Bonap).

More common on Mainland than Vancouver Island. Taken in the Okanagan country.

Peale's Falcon (*Falco peregrinus pealei*, Ridgw).

Found chiefly along the Coast of Mainland and Vancouver Island. Taken at Cadboro Bay, near Victoria; at Chilliwack and Metlakatla.

Pigeon Hawk (*Falco columbarius*, Linn).

Apparently more common east of the Coast Range. Has been taken on the coast; also at Chilliwack and Okanagan.

Black Merlin (*Falco columbarius suckleyi*, Ridgw).

Abundant in summer on Vancouver Island and portions of the Mainland. Taken at Chilliwack.

Richardson's Merlin (*Falco richardsonii*, Ridgw).

Not common on Vancouver Island. Taken near Victoria, Chilliwack and Okanagan.

Desert Sparrow Hawk (*Falco sparverius phalaena*, Lesson).

Abundant throughout the southern portions of the Mainland, including Vancouver Island, from the coast to Rocky Mountains.

PANDION. (Savigny).

American Osprey. Fish Hawk (*Pandion haliaetus carolinensis*, Gmel).

Common throughout the Province on Mainland and Island, including Queen Charlotte Islands. Their nest is a huge heap of sticks usually on the broken top of a tree.

FAMILY BUBONIDÆ. HORNED OWLS, ETC.

ASIO. (Brisson).

American Long-eared Owl (*Asio wilsonianus*, Less).

This bird is frequently seen abroad during the day, but is not remarkable for its voice or habits. It is not common in the Province. Taken at Vancouver Island, Chilliwack and Okanagan.

Short-eared Owl (*Asio accipitrinus*, Pall).

Common throughout the Province on Island and Mainland.
Rather common near Victoria throughout the winter.

SYRNIUM. (Savigny).

***Northern Spotted Owl** (*Syrnium occidentalis caurinum*, Merriam).

Chilliwack.

SCOTIAPTEX. (Swainson).

Great Grey Owl (*Scotiaptex nebulosa*, Forster).

Rare in the Province. Taken at Vernon, Stuart Lake and Chilliwack.

CRYPTOGLAUX. (Richmond).

Richardson's Owl (*Cryptoglaux tengmalmi richardsoni*, Bonap).
Okanagan and Chilliwack.**Saw-whet Owl** (*Cryptoglaux acadica*, Gmel).

Not common on Vancouver Island; common in winter at Okanagan. Taken at Chilliwack, Victoria and Okanagan.

Northwest Saw-whet Owl (*Cryptoglaux acadica scotæa*, Osgood).
Queen Charlotte Islands.

MEGASCOPS. (Kaup).

Kennicott's Screech Owl (*Megascops asio kennicottii*, Elliot).

Abundant throughout the Province. Breeds in the neighbourhood of Victoria.

***Macfarlane's Screech Owl** (*Megascops asio macfarlanei*, Brewst).

Southern portion of the Province, east of Cascade Mountains.

Puget Sound Screech Owl (*Megascops asio saturatus*, Brewster).

BUBO. (Dumeril).

***Great Horned Owl** (*Bubo virginianus*, Gmel).

Chilliwack and Victoria.

Western Horned Owl (*Bubo virginianus pallescens*, Stone).

Common on Vancouver Island and Mainland. Taken at Chilliwack and Okanagan.



NORTH-WEST COAST HERON. *ARDEA HERODIUS FANNINII* (CHAPMAN).
Group in Provincial Museum, Victoria, B. C.

Arctic Horned Owl (*Bubo virginianus arcticus*, Swains).

Taken near Victoria and at Chilliwack.

Dusky Horned Owl (*Bubo virginianus saturatus*, Ridgw).

An abundant resident in this Province; common on Vancouver Island; taken at Chilliwack and Okanagan.

NYCTEA. (Stephens).

Snowy Owl (*Nyctea nyctea*, Linn).

A resident in the northern portions of the Province; south in winter to mouth of Fraser River, Chilliwack and Okanagan; occasionally to Vancouver Island. Rare at Metlakatla.

SURNIA. (Duméril).

American Hawk Owl (*Surnia ulula caparoch*, Mull).

Not common, but found throughout the southern part of the Province, from the coast to Okanagan. Rare on Vancouver Island. Taken at Victoria, Sardis, Grand Prairie and Vernon.

SPEOTYTO. (Gloger).

Burrowing Owl (*Speotyto cunicularia hypogæa*, Bonap).

Not common in the Province. Taken at Chilliwack and Vernon.

GLAUCIDIUM. (Boie).

California Pygmy Owl (*Glaucidium gnoma californicum*, Sel).

Common throughout the southern portions of the Province, including Vancouver Island.

ORDER COCCYGES. CUCKOOS and KINGFISHERS.

FAMILY CUCULIDÆ. CUCKOOS.

COCCYZUS. (Vieillot).

Western Yellow-billed Cuckoo, California Cuckoo (*Coccyzus americanus occidentalis*, Ridgw).

A regular summer resident in the south-western portion of the Province. The European Cuckoo never constructs a nest for itself, but drops its eggs in those of other birds, and abandons them to their mercy and management. This conduct of the Cuckoo is so universally known, and so proverbial, that the whole tribe of

Cuckoos have, by some inconsiderate people, been stigmatised as destitute of all parental care and affection. Without attempting to account for this remarkable habit of the European species, far less to consider as an error what the wisdom of Heaven has imposed as a duty on the species, it must be remarked that the bird now before us builds its own nest, hatches its own eggs, and rears its own young; and in conjugal and parental affection seems nowise behind any of its neighbours of the grove. Both parents unite in providing food for the young. This consists for the most part of caterpillars, particularly such as infest trees. They are accused, with some justice, of sucking the eggs of other birds, like the Crow, the Blue Jay and other pillagers. They also occasionally eat various kinds of berries; but from the circumstance of destroying such numbers of very noxious larvæ, they prove themselves the friends of the farmer, and are highly deserving of his protection. Breeds on Vancouver Island, near Victoria. Taken at Chilliwack.

FAMILY ALCEDINIDÆ. KINGFISHERS.

CERYLE. (Boie).

Belted Kingfisher (*Ceryle alcyon*, Linn).

Abundant throughout the Province. Breeds throughout its range.

ORDER PICI. WOODPECKERS, WRYNECKS, Etc.

FAMILY PICIDÆ. WOODPECKERS.

DRYOBATES. (Boie).

Northern Hairy Woodpecker (*Dryobates villosus leucomelas*, Bodd).

Common on Mainland, east of Cascade Mountains. Taken at Sicamous and Chilliwack.

Harris's Woodpecker (*Dryobates villosus harisii*, Aud).

A common resident west of coast range, including Vancouver Island.

Cabanis's Woodpecker (*Dryobates villosus hyloscopus*, Cab).

Okanagan.

Queen Charlotte Woodpecker (*Dryobates villosus picoideus*, Osgood).

Queen Charlotte Islands.

Gairdner's Woodpecker (*Dryobates pubescens gairdneri*, Aud).

A common resident on Vancouver Island, coast of Mainland, and Lower Fraser Valley.

Batchelder's Woodpecker (*Dryobates pubescens homorus*, Cab).

Common throughout the interior of the Province, along the C. P. R. at Ducks, and at Vernon. Taken at Chilliwack and Okanagan.

XENOPICUS. (Baird).

White-headed Woodpecker (*Xenopicus albolarvatus*, Cass).

A rare bird in this Province. Found east of the Coast Range. Taken in the Similkameen Valley.

PICOIDES. (Lacépède).

Arctic, or Black-backed Three-toed Woodpecker (*Picoides arcticus*, Swains).

Found only east of Coast Range, where in some localities it is quite common. Taken at Okanagan.

***Alaskan Three-toed Woodpecker** (*Picoides americanus fasciatus*, Baird).

Rare on Vancouver Island. Common in the spruce zone on the Coast Range.

***Alpine Three-toed Woodpecker** (*Picoides americanus dorsalis*, Baird).

Mountains east of Cascades, and north to Cassiar.

SPHYRAPICUS. (Baird).

Red-naped Sapsucker (*Sphyrapicus varius nuchalis*, Baird).

Generally distributed east of Cascade Mountains throughout the Province. It is quite common at Ducks.

Red-breasted Sapsucker (*Sphyrapicus ruber notkensis*, Suckow).

Distributed along the coast. Not uncommon on Vancouver Island. Taken at Chilliwack.

*Williamson's Sapsucker (*Sphyrapicus thyroideus*, Cass).
Similkameen.

CEOPHLÆUS. (Cabanis).

Northern Pileated Woodpecker (*Ceophlæus pileatus abieticola*, Bangs).

Common resident throughout the Province on Vancouver Island and Mainland through the interior to Okanagan. Scarce in the Cariboo District.

ASYNDESMUS. (Coues).

Lewis's Woodpecker (*Asyndesmus torquatus*, Wils).

The plumage of this remarkable Woodpecker is peculiar, both in texture and colour. No other specie of our country shows such a rich metallic iridescence, or such intense crimson, and in none is the plumage so curiously modified into a bristly character; unlike most species again the sexes are not certainly distinguishable. The young, however, differ very materially, the under-parts being dull gray, only here and there slashed with red, the face lacking the crimson velvety pilous area, and the upper parts being much more lustrous. This fine species is chiefly a bird of the vast forests that clothe most of our mountain ranges with permanent verdure, with this limitation—its distribution is extensive. It is abundant through the interior of the Province, common at Chilliwack, and a summer resident of Vancouver Island.

COLAPTES. (Swainson).

Northern Flicker (*Colaptes auratus luteus*, Bangs).

A rare bird of this Province, but is found on Vancouver Island and east to the Rocky Mountains.

Red-shafted Flicker (*Colaptes cafer collaris*, Vigors).

Common east of Cascade Mountains, through the interior, at Ducks, Sicamous and Okanagan.

North-western Flicker (*Colaptes cafer saturator*, Ridgw).

Abundant resident west of Cascade Mountains; very common on Vancouver Island.



PIED-BILLED GREBE. *PODILYMBUS PODICEPS* (LINN.).
Group in Provincial Museum, Victoria, B. C.

ORDER MACROCHIRES. GOATSUCKERS, SWIFTS, Etc.

FAMILY CAPRIMULGIDÆ. GOATSUCKERS.

PHALÆNOPTILUS. (Ridgway).

Poor-will (*Phalænoptilus nuttallii*, Aud).

Southern interior portions of Province from Kamloops through the Okanagan. Summer resident.

CHORDEILES. (Swainson).

*Nighthawk (*Chordeiles virginianus*, Gmel).

East of Cascade Mountains.

Western Nighthawk (*Chordeiles virginianus henryi*, Cass).

A summer resident west of Cascade Mountains. Abundant on Vancouver Island.

FAMILY MICROPODIDÆ. SWIFTS.

CYPSELOIDES. (Streubel).

Black Swift (*Cypseloides niger borealis*, Ridgw).

Common near Victoria during migration. Taken at Chilliwack and Okanagan. Breeds in mountains back of Chilliwack and in the neighbourhood of Comox.

CHÆTURA. (Stephens).

Vaux's Swift (*Chætura vauuxii*, Towns).

A summer resident on Vancouver Island and Mainland. Very common near Sicamous.

AERONAUTES. (Hartert).

White-throated Swift (*Aëronautes melanoleucus*, Baird).

Kerémeos, Okanagan.

FAMILY TROCHILIDÆ. HUMMINGBIRDS.

TROCHILUS. (Linnaeus).

Black-chinned Hummingbird (*Trochilus alexandri*, Bourc and Muls).

Chilliwack.

SELASPHORUS (Swainson).

Red-backed Rufous Hummingbird (*Selasphorus rufus*, Gmel).

Vancouver Island and Okanagan; common at Metlakatla.

*Green-backed Rufous Hummingbird (*Selasphorus alleni*, Hensh).

Eastern Cascades and Rocky Mountains.

STELLULA. (Gould).

Calliope Hummingbird (*Stellula calliope*, Gould).

East and west of Cascade Mountains.

ORDER PASSERES. PERCHING BIRDS.

FAMILY TYRANNIDÆ. TYRANT FLYCATCHERS.

TYRANNUS. (Cuvier).

Kingbird (*Tyrannus tyrannus*, Linn).

A common summer resident on the Mainland at Chilliwack, Sardis, Ducks, and Vernon, and as far north as Port Simpson. Rare on Vancouver Island.

Gray Kingbird (*Tyrannus dominicensis*, Gmel).

Cape Beale, B. C.

Arkansas Kingbird (*Tyrannus verticalis*, Say).

A common resident on the Mainland. Common at Chilliwack, Ducks and Okanagan. Rarely west to Vancouver Island.

SAYORNIS. (Bonaparte).

Say's Phoebe (*Sayornis saya*, Bonap).

A summer resident on Vancouver Island and Mainland. Taken at Chilliwack and Okanagan.

CONTOPUS. (Cabanis).

Olive-sided Flycatcher (*Contopus borealis*, Swains).

A summer resident on Vancouver Island and Mainland. Taken at Chilliwack and Okanagan.

Western Wood Pewee (*Contopus richardsonii*, Swains).

A common summer resident on Vancouver Island and Mainland. Very common at Sicamous.

EMPIDONAX. (Cabanis).**Western Flycatcher** (*Empidonax difficilis*, Baird).

A common summer resident west of Cascade Mountains on Mainland and on Vancouver Island. Also at Skidegate, Queen Charlotte Islands.

Traill's Flycatcher (*Empidonax trailli*, Aud).

Vancouver Island and Mainland, at Sicamous and Vernon; also Chilliwack and Okanagan.

Hammond's Flycatcher (*Empidonax hammondi*, Xantus).

Summer resident, chiefly on the Mainland. Taken Vancouver Island.

Wright's Flycatcher (*Empidonax wrightii*, Baird).

Summer resident. Taken at Chilliwack and Okanagan.

FAMILY ALAUDIDÆ. LARKS.**OTOCORIS.** (Bonaparte).**Pallid Horned Lark** (*Otocoris alpestris leucolæma*, Coues).

Common in spring and autumn on Vancouver Island. Taken at Clover Point, near Victoria; also at Chilliwack and Okanagan.

Streaked-Horned Lark (*Otocoris alpestris strigata*, Hensh).

Spring and autumn migrant on Vancouver Island. Taken at Chilliwack. West of Cascades, Burrard Inlet, Vancouver Island and Port Simpson.

Dusky Horned Lark (*Otocoris alpestris merrilli*, Dwight).

Chiefly east of Cascades. Never known to be taken on Vancouver Island. Taken at Chilliwack, Okanagan and Osoyoos.

FAMILY CORVIDÆ. CROWS, JAYS, MAGPIES.

PICA. (Brisson).

American Magpie (*Pica pica hudsonica*, Sab).

A common resident on the Mainland, rarely west to Vancouver Island. Breeds in the interior of the Mainland, east of Cascade Mountains. It is a social bird, although not gregarious, being usually found in pairs or small parties of from three to six or eight, but quite often goes alone. It is very voracious, living upon seeds, carrion, insects, etc., and being especially fond of the eggs and young of other birds, of which it destroys very great quantities. It is easily caught and tamed, even when old, and soon becomes very cunning and mischievous, exhibiting the same traits as the crow, and, like that bird, is said to imitate the human voice with some aptitude. It has almost an infinite variety of notes, some low, gurgling and musical, some harsh and discordant, others squeaky and grating. It is very noisy at times, and quite silent at others, when engaged in robbing bird's nests or foraging near dwellings or barns. It is not a shy bird, but if frequently shot it soon learns to keep out of range.

CYANOCITTA. (Strickland).

Steller's Jay (*Cyanocitta stelleri*, Gmel).

An abundant resident west of Coast Range on Mainland and Vancouver Island throughout the year.

Black-headed Jay (*Cyanocitta stelleri annectens*, Baird).

Common in the interior from the Cascades east down through the Okanagan. Taken at Chilliwack.

***Queen Charlotte Jay** (*Cyanocitta stelleri carlottæ*, Osgood).

Queen Charlotte Islands.

PERISOREUS. (Bonaparte).

Rocky Mountain Jay (*Perisoreus canadensis capitalis*, Ridgw).

East of Cascade Mountains. Taken at Okanagan and in the Cariboo District.

Oregon Jay (*Perisoreus obscurus*, Ridgw).

An abundant resident west of Cascades on the Mainland; but not as numerous on Vancouver Island.



GREAT NORTHERN DIVER. *GAVIA IMBER* (GUNN.).
Group in Provincial Museum, Victoria, B. C

***Gray Jay** (*Perisoreus obscurus griseus*, Ridgw.).

East of the Coast and Cascade Ranges.

CORVUS (Linnæus).

Northern Raven (*Corvus corax principalis*, Ridgw.).

A resident throughout the Province; more common on the Coast
Taken at Chilliwack and Okanagan.

American Crow (*Corvus brachyrhynchos*, Brehm.).

Common east of Coast Range. Chilliwack and Okanagan.

Northwest Crow (*Corvus caurinus*, Baird).

An abundant resident west of Cascade Mountains on Mainland
and Vancouver Island, and at Skidegate, Queen Charlotte Islands.

NUCIFRAGA. Brisson).

Clarke's Nutcracker (*Nucifraga columbiana*, Wils.).

A common resident on the Mainland, chiefly east of Coast
Range; rare on Vancouver Island.

CYANOCEPHALUS. (Bonaparte).

***Blue Crow, Pinion Jay** (*Cyanocephalus cyanocephalus*, Wied).

Rocky Mountain region to the Pacific Coast Ranges.

FAMILY ICTERIDÆ. BLACKBIRDS, ORIOLES, Etc.

DOLICHONYX. (Swainson).

***Bobolink** (*Dolichonyx oryzivorus*, Linn.).

East and west of Cascade Mountains. Chilliwack.

MOLOTHRUS. (Swainson)...

Cowbird (*Molothrus ater*, Bodd.).

A summer resident. Fairly common in the neighbourhood of
Ducks, on C. P. R., and Okanagan. Rare on Vancouver Island and
Metlakatla. Taken near Victoria and Chilliwack.

XANTHOCEPHALUS. (Bonaparte).

Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*,
Bonap.).

A rare summer resident on the Mainland. Taken at Chilli-
whack.

AGELIAUS. (Vieillot).

San Diego Redwing (*Agelias phœniceus neutralis*, Ridgw).

East of Cascades. Taken at Vernon.

Northwestern Redwing (*Agelias phœniceus caurinus*, Ridgw).

Common west of Cascades on Mainland and Vancouver Island. Found throughout the year near Victoria.

STURNELLA. (Vieillot).

Western Meadowlark (*Sturnella magna neglecta*, Aud).

Is an abundant resident on Mainland and Vancouver Island; east and west of Cascades.

ICTERUS. (Brisson).

Bullock's Oriole (*Icterus bullocki*, Swains).

A fairly common summer resident, chiefly east of Cascades. Breeds along the valley of the Thompson and in the Okanagan near Vernon, also at Chilliwack.

EUPHAGUS. (Cassin).

Rusty Blackbird (*Euphagus carolinus*, Muller).

Rare. Metlakatla.

Brewer's Blackbird (*Euphagus cyanocephalus*, Wagler).

Common generally on the Mainland, also in Lower Fraser Valley, Grand Prairie, south side of Thompson River, down into the Okanagan country. Breeding in suitable localities. Not common on Vancouver Island. Taken near Victoria.

FAMILY FRINGILLIDÆ. FINCHES, SPARROWS, ETC.

HESPERIPHONA. (Bonaparte).

Western Evening Grosbeak (*Hesperiphona vespertina montana*, Ridgw).

Chiefly on the Mainland. West in winter to Vancouver Island and Lower Fraser Valley. Taken at Chilliwack and Okanagan.

PINICOLA. (Vieillot).

Alaskan Pike Grosbeak (*Pinicola enucleator alascensis*, Ridgw).

Mainland east and west of Cascade Mountains, including Vancouver Island. Common in winter in the neighbourhood of Clinton.

CARPODACUS. (Kaup).

California Purple Finch (*Carpodacus purpureus californicus*, Baird).

An abundant summer resident west of Cascades. Quite a number winter on Vancouver Island.

Cassin's Purple Finch (*Carpodacus cassini*, Baird).

Tolerably common east of Cascades to Rocky Mountains.

LOXIA. (Linnaeus).

American Crossbill (*Loxia curvirostra minor*, Brehm).

An abundant resident throughout the Province, Island and Mainland.

White-winged Crossbill (*Loxia leucoptera*, Gmel).

An abundant resident, chiefly on the Mainland, occasionally west to Vancouver Island.

LEUCOSTICTE. (Swainson).

Gray-crowned Leucosticte (*Leucosticte tephrocotis*, Swains).

Rocky Mountain District. In winter occasionally west of Cascades. Taken as far west as Chilliwack.

Hepburn's Leucosticte (*Leucosticte tephrocotis littoralis*, Baird).

Common on Mainland from coast to Rocky Mountains. Breeds above timber line in the interior.

ACANTHIS. (Bechstein).

Hoary Redpoll (*Acanthis hornemannii exilipes*, Cones).

Taken at mouth of Quesnel River and Chilliwack.

Redpoll (*Acanthis linaria*, Linn).

Found throughout the Province; more abundant in the Rocky Mountain District. West in winter to Vancouver Island.

ASTRAGALINUS. (Cabanis).

Willow Goldfinch (*Astragalinus tristis salicamans*, Grinnell).

Taken at Okanagan.

SPINUS. (Koch).

Pine Siskin (*Spinus pinus*, Wils).

An abundant resident throughout the Province. Breeds throughout its range.

PASSER. (Brisson).

***House Sparrow** (*Passer domesticus*, Linn).

Quite common in the cities along the Coast.

PASSERINA. (Vieillot).

Snowflake (*Passerina nivalis*, Linn).

Not common on Vancouver Island; more abundant east of Cascades on the Mainland.

CALCARIUS. (Bechstein).

Lapland Longspur (*Calcarius lapponicus*, Linn).

The Province at large but nowhere common. Taken at Victoria, Chilliwack, Burrard Inlet, Okanagan, Port Simpson and Metlakatla.

RHYNCHOPHANES. (Baird).

McGown's Longspur (*Rhynchophanes mccownii*, Lawr).

Chilliwack.

POECETES. (Baird).

Western Vesper Sparrow (*Poæcetos gramineus confinis*, Baird).

Interior portions of the Mainland east of Cascades, and in the Okanagan.

Oregon Vesper Sparrow (*Poæcetos gramineus affinis*, Miller).

West of Cascades, including Vancouver Island.

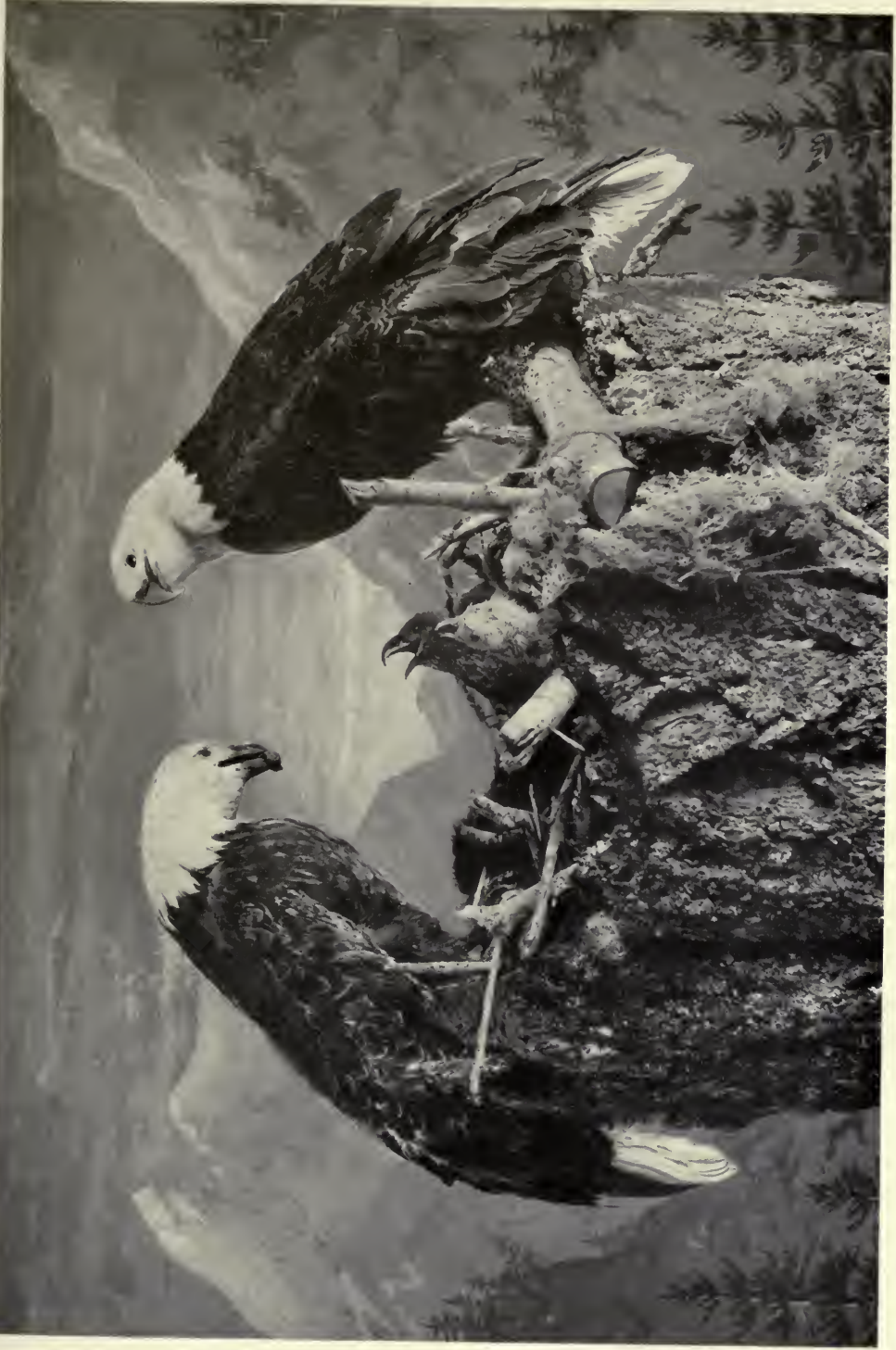
PASSERCULUS. (Bonaparte).

Sandwich Sparrow (*Passerculus sandwichensis*, Gmel).

An abundant summer resident west of Cascades on the Mainland, also Vancouver Island. Taken at Okanagan.

Western Savanna Sparrow (*Passerculus sandwichensis alaudinus*, Bonaparte).

A common summer resident on the Coast, including Vancouver Island.



BALD EAGLE. *HALIAEETUS LEUCOCEPHALUS ALASCANUS* (TOWNSEND).
Group in Provincial Museum, Victoria, B. C.

COTURNICULUS. (Bonaparte).

Western Grasshopper Sparrow (*Coturniculus savannarum bimaculatus*, Swainson).

A common summer resident in the Okanagan near Vernon.

CHONDESTES. (Swainson).

Western Lark Sparrow (*Chondestes grammacus strigatus*, Swains).

Interior southern portions of the Mainland, from Chilliwack east through the Okanagan.

ZONOTRICHIA. (Swainson).

Harris's Sparrow (*Zonotrichia querula*, Nutt).

Taken at Cadboro Bay, near Victoria, Comox and Sumas.

Gambel's Sparrow (*Zonotrichia leucophrys gambelii*, Nutt).

Common. Mainland, east of Coast Range, east to Okanagan.

Intermediate Sparrow (*Zonotrichia leucophrys intermedia*, Ridgw).

Found throughout British Columbia.

Golden-crowned Sparrow (*Zonotrichia coronata*, Pallas).

Abundant during migrations on the Coast. Taken at Chilliwack and Okanagan.

SPIZELLA. (Bonaparte).

Western Tree Sparrow (*Spizella monticola ochracea*, Brewst).

Taken at Chilliwack and Okanagan; also at Victoria.

Western Chipping Sparrow (*Spizella socialis arizonæ*, Coues).

An abundant summer resident east and west of Cascades. Breeds near Victoria where a number remain throughout the winter.

Clay-coloured Sparrow (*Spizella pallida*, Swains).

Carpenter's Mountain, 150-Mile House, Cariboo.

Brewer's Sparrow (*Spizella breweri*, Cass).

Eastern Cascades and Rocky Mountain Districts, Similkameen and Okanagan.

JUNCO. (Wagler).

*Slate-coloured Junco (*Junco hyemalis*, Linn).

Chilliwack.

Oregon Junco (*Junco hyemalis oregonus*, Townsend).

Abundant resident west of Cascades; also Vancouver Island.

*Shufeldt's Junco (*Junco hyemalis shufeldti*, Coale).

Breeding from interior British Columbia (Stuart's Lake) east to Rocky Mountains, south to Vancouver Island.

MELOSIPZA. (Baird).

Rusty Song Sparrow (*Melospiza cinerea morphna*, Oberh).

An abundant resident throughout the Province. Breeds on Vancouver Island and Mainland.

Sooty Song Sparrow (*Melospiza cinerea rufina*, Bonap).

Abundant along the coast of Mainland and north-west Vancouver Island; also common at Skidegate, Queen Charlotte Islands.

Forbush's Sparrow (*Melospiza lincolni striata*, Brewst).

Comox, Chilliwack and Victoria.

PASSERELLA. (Swainson).

Townsend's Sparrow (*Passerella iliaca unalschensis*, Gmel).

A common summer resident west of Cascades. Taken on Vancouver Island, where a few remain all winter.

Slate-coloured Sparrow (*Passerella iliaca schistacca*, Baird).

Southern portion of Mainland east of Cascades, Sicamous and Okanagan.

Sooty Fox Sparrow (*Passerella iliaca fuliginosa*, Ridgw).

Vancouver Island.

PIPILO. (Vieillot).

Spurred Towhee (*Pipilo maculatus megalonyx*, Baird).

East of Cascades and through the Okanagan.

Oregon Towhee (*Pipilo maculatus oregonus*, Bell).

An abundant resident west of Cascades. Breeds on Vancouver Island and Mainland.

ZAMELODIA. (Coues).

Black-headed Grosbeak (*Zamelodia melanocephala*, Swains).

A summer resident on Vancouver Island, and east and west of Cascades. Taken at Chilliwack.

CYANOSPIZA. (Baird).

Lazuli Bunting (*Cyanospiza amœna*, Say).

A summer resident, chiefly east of Cascades. Rare on Vancouver Island. Seen at Chilliwack and near Vernon.

FAMILY TANAGRIDÆ. TANAGERS.

PIRANGA. (Vieillot).

Louisiana Tanager (*Piranga ludoviciana*, Wils).

An abundant summer resident throughout the Province.

FAMILY HIRUNDINIDÆ. SWALLOWS.

PROGNE. (Boie).

Purple Martin (*Progne subis*, Linn).

A common summer resident, chiefly in the cities along the Coast. West of Cascades.

PETROCHELIDON. (Cabanis).

Cliff Swallow (*Petrochelidon lunifrons*, Say).

Common summer resident on the Mainland, east and west of Cascades, Chilliwack, Okanagan and Cariboo Road.

HIRUNDO. (Linn).

Barn Swallow (*Hirundo erythrogastra*, Bodd).

Abundant summer resident throughout the Province; including Vancouver Island and Queen Charlotte Islands.

TACHYCINETA. (Cabanis).

White-bellied Swallow (*Tachycineta bicolor*, Vieill).

An abundant summer resident east and west of Cascades.



ORNITHOLOGY, PALEONTOLOGY, INVERTEBRATES.
2nd Floor, Provincial Museum.

Northern Violet-green Swallow (*Tachycineta thalassina lepida*, Mearns).

An abundant summer resident throughout the Province east and west of Cascades.

RIPARIA. (Forester).

Bank Swallow (*Riparia riparia*, Linn).

An abundant summer resident, chiefly east of Cascades north to Cariboo District. Very common from Sicamous down through the Okanagan. Taken at Chilliwack.

STELGIDOPTERYX. (Baird).

Rough-winged Swallow (*Stelgidopteryx serripennis*, Aud).

A common resident throughout the Province.

FAMILY AMPELIDÆ. WAXWINGS.

AMPELIS. (Linnæus).

Bohemian Waxwing (*Ampelis garrulus*, Linn).

An abundant resident, chiefly east of Cascades. A winter visitant to the Coast and Vancouver Island.

Cedar Bird (*Ampelis cedrorum*, Vieill).

A common summer resident throughout the Province

FAMILY LANIIDÆ. SHRIKES.

LANIUS. (Linnaeus).

Northern Shrike, Butcher Bird (*Lanius borealis*, Vieill).

Not common, but found distributed throughout the Province. Found throughout the winter on the Coast.

***White-rumped Shrike** (*Lanius ludovicianus excubitorides*, Swains).

Chilliwack and Victoria.

FAMILY VIREONIDÆ. VIREOS.

VIREO. (Vieillot).

Red-eyed Vireo (*Vireo olivaceus*, Linn).

Distributed over the southern portions of the Province; also Vancouver Island. A summer resident. Taken at Chilliwack and Okanagan.

Western Warbling Vireo (*Vireo gilvus swainsonii*, Baird).

Common summer resident west of Rocky Mountains to Pacific.

Cassin's Vireo (*Vireo solitarius cassinii*, Xantus).

A summer resident east and west of Cascades, including Vancouver Island.

Anthony's Vireo. Dusky Vireo (*Vireo huttoni obscurus*, Anthony).

Resident on Vancouver Island and Mainland.

FAMILY MNIOTILTIDÆ. WOOD WARBLERS.

HELMINTHOPILA. (Ridgway).

Calaveras Warbler (*Helminthophila ruficapilla gutturalis*, Ridgw.).

Rocky Mountains to Pacific. A summer resident. Common in the Okanagan.

Orange-crowned Warbler (*Helminthophila celata*, Say).

A common summer resident east of Cascades.

Lutescent Warbler (*Helminthophila celata lutescens*, Ridgw.).

An abundant summer resident, chiefly west of Cascades and along the coast of Mainland and Vancouver Island.

Tennessee Warbler (*Helminthophila peregrina*, Wils.).

Taken at 150-Mile House, Cariboo.

DENDROICA. (Gray).

Alaskan Yellow Warbler (*Dendroica aestiva rubiginosa*, Pallas).

An abundant summer resident throughout the Province from Rocky Mountains to the Pacific.

Myrtle Warbler (*Dendroica coronata*, Linn.).

An abundant summer resident on Vancouver Island and Mainland, chiefly west of Cascades. Rare at Metlakatla. Taken in Okanagan.

Audubon's Warbler (*Dendroica auduboni*, Towns.).

An abundant summer resident throughout the Province from Vancouver Island east to the Rocky Mountains.

***Magnolia Warbler** (*Dendroica maculosa*, Gmel).

Okanagan.

Black-throated Gray Warbler (*Dendroica nigrescens*, Towns).

Not common. A summer resident west of Cascades, but chiefly along the Coast. Taken at Chilliwack.

Townsend's Warbler (*Dendroica townsendi*, Townsend).

Not common, but found distributed throughout the Province, chiefly west of Cascades, including Vancouver Island and Queen Charlotte Islands.

***Hermit Warbler. Western Warbler** (*Dendroica occidentalis*, Townsend).

A summer resident, chiefly west of Cascade Range.

SEIURUS. (Swainson).

Grinnell's Water-thrush (*Seiurus noveboracensis notabilis*, Ridgw).

Taken at Ducks, C. P. R.; and Quesnel.

GEOTHLYPIS. (Cabanis).

Macgillivray's Warbler (*Geothlypis tolmiei*, Towns).

A common summer resident throughout the Province.

Western Yellow-throat (*Geothlypis trichas occidentalis*, Brewst).

A common summer resident throughout the Province.

Pacific Yellow-throat (*Geothlypis trichas arizela*, Oberh).

Summer resident in the southern portions of the Mainland and Vancouver Island.

ICTERIA. (Vieillot).

Long-tailed Chat (*Icteria virens longicauda*, Lawr).

Summer resident in the southern portions of the Province from Sumas east to Okanagan, south of Ashcroft.

WILSONIA. (Bonaparte).

***Wilson's Warbler** (*Wilsonia pusilla*, Wils).

Vancouver Island and Mainland, east and west of Cascades.

Pileolated Warbler (*Wilsonia pusilla pileolata*, Pall).

A common summer resident on Vancouver Island and Mainland.

Golden Pileolated Warbler (*Wilsonia pusilla chryscola*, Ridgw).

A summer resident, New Westminster and Mount Lehman:

SETOPHAGA. (Swainson).

American Redstart (*Setophaga ruticilla*, Linn).

Found throughout the interior of the Province from Barkerville south to Okanagan, chiefly east of and accidentally west of, Cascades. Taken at Chilliwack.

FAMILY MOTACILLIDÆ. WAGTAILS AND PIPITS

ANTHUS. (Bechstein).

American Pipit (*Anthus pensilvanicus*, Lath).

Very abundant during migration east and west of Cascades. Found throughout some winters on Vancouver Island.

FAMILY CINCLIDÆ. DIPPERS.

CINCLUS. (Bechstein).

American Dipper (*Cinclus mexicanus*, Swains).

Common throughout the Province in suitable localities.

FAMILY TROGLODYTIDÆ. WRENS.

GALEOSOPTES. (Cabanis).

Catbird (*Galeoscoptes carolinensis*, Linn).

A common summer resident east and west of Cascades. Rare on Vancouver Island.

SALPINCTES. (Cabanis).

Rock Wren (*Salpinctes obsoletus*, Say).

Common east of Cascades; rarely west to the Coast. Chilliwack and Burrard Inlet.

THRYOMANES. (Sclater).

Vigor's Wren (*Thryomanes bewickii spilurus*, Vig).

A common summer resident west of Cascades. Found throughout the winter on Vancouver Island.



ORNITHOLOGICAL HALL (West View).

TROGLODYTES. (Vieillot).

Parkman's Wren (*Troglodytes ædon parkmanii*, Aud).

A common summer resident east and west of Cascades, including Vancouver Island.

OLBIORCHILUS. (Oberholser).

Western Winter Wren (*Olbiorchilus hiemalis pacificus*, Baird).

An abundant resident east and west of Cascades, including Vancouver Island.

TELMATODYTES. (Cabanis).

Tule Wren (*Telmatodytes palustris paludicola*, Baird).

Abundant east of Cascades, from the lakes along the Cariboo Road, south through the Okanagan. Taken at Chilliwack.

FAMILY CERTHIIDÆ. CREEPERS.

CERTHIA. (Linnæus).

Rocky Mountain Creeper (*Certhia familiaris montana*, Ridgw).

Southern portion of east of Cascades. Okanagan.

California Creeper (*Certhia familiaris occidentalis*, Ridgw).

Common on Vancouver Island. East and west of Cascades on the Mainland.

FAMILY SITTIDÆ. NUTHATCHES.

SITTA. (Linnæus).

Slender-billed Nuthatch (*Sitta carolinensis aculeata*, Cass).

Common east of Cascades from Ashcroft south through the Okanagan. Common near Shuswap.

Red-breasted Nuthatch (*Sitta canadensis*, Linn).

Common east and west of Cascades. Found throughout the winter on Vancouver Island.

Pygmy Nuthatch (*Sitta pygmaea*, Vig).

East of Cascades in the south-eastern portions of the Province. Common at Grand Prairie.

FAMILY PARIDÆ. TITMICE OR CHICKADEES.

PARUS. (Linnæus).

Long-tailed Chickadee (*Parus atricapillus septentrionalis*, Harris).

Common east of Cascades, from Cornwall's south to Okanagan.

Oregon Chickadee (*Parus atricapillus occidentalis*, Baird).

A common resident west of Cascades.

Mountain Chickadee (*Parus gambeli*, Ridgw.).

East of Cascades to Rocky Mountains and south through Okanagan.

Columbia Chickadee (*Parus hudsonicus columbianus*, Rhoads).

East of Cascades to Rocky Mountains from Cassiar District south to Okanagan.

Chestnut-backed Chickadee (*Parus rufescens*, Towns).

An abundant resident, chiefly west of Cascades, Vancouver Island and Queen Charlotte Islands. Taken at Arrow Lake.

FAMILY CHAMÆIDÆ. TITS AND BUSH-TITS.

PSALTRIPARUS. (Bonaparte).

Least Bush-tit (*Psaltriparus minimus*, Towns).

Rare. Taken at Sumas.

FAMILY SYLVIIDÆ. WARBLERS, KINGLETS.

REGULUS. (Cuvier).

Western Golden-crowned Kinglet (*Regulus satrapa olivaceus*, Baird).

Abundant throughout the Province.

Ruby-crowned Kinglet (*Regulus calendula*, Linn.).

Abundant throughout the Province.

FAMILY TURDIDÆ. THRUSHES, SOLITAIRES AND BLUEBIRDS.

MYADESTES. (Swainson).

Townsend's Solitaire (*Myadestes townsendii*, Aud.).

Not common. Found east and west of Cascades, including Vancouver Island.



ORNITHOLOGICAL HALL (East View).

HYLOCICHLA. (Baird).

Willow Thrush (*Hylocichla fuscescens salicicola*, Ridgw.).

A common summer resident east of Cascades.

Russet-backed Thrush (*Hylocichla ustulata*, Nutt.).

A common resident west of Cascades. Very common on Queen Charlotte Islands.

Olive-backed Thrush (*Hylocichla ustulata swainsonii*, Cab.).

Southern portion of Mainland east of Cascades.

Alaska Hermit Thrush (*Hylocichla guttata*, Pallas).

West of Cascades, chiefly coastwise. Common at Skidegate, Queen Charlotte Islands.

***Audubon's Hermit Thrush** (*Hylocichla guttata auduboni*, Baird).

Southern portions of the Province, east of Cascades to Rocky Mountains.

MERULA. (Leach).

American Robin (*Merula migratoria*, Linn.).

Both forms are to be found on Vancouver Island. Taken at Chilliwhack.

Western Robin (*Merula migratoria propinqua*, Ridgw.).

An abundant resident throughout the Province.

IXOREUS. (Bonaparte).

Varied Thrush (*Ixoreus naevius*, Gmel.).

Common throughout the Province east and west of Cascades.

SIALIA. (Swainson).

Western Bluebird (*Sialia mexicana occidentalis*, Towns.).

A common summer resident east and west of Cascades. A few winter on Vancouver Island.

Mountain Bluebird (*Sialia arctica*, Swains.).

A summer resident east and west of Cascades, including Vancouver Island.

NOTE.—The names with an asterisk (*) before them are the specimens not in the collection of birds or skins, but known to occur in British Columbia.

BIRD SKINS.

The study series of skins, numbering over 1,000, and containing a fair representative collection of the birds of the Province, can be seen on application to the Curator, who will be pleased to show them at any time.

GROUPS IN CASES.

Great Northern Diver (Loon) and young, with Red-winged Blackbird; nest and eggs.

Pied-billed Grebes and nest, with young.

Some of our winter visitants; Chickadees and Kinglets.

Waxwings in wild cherry tree.

Western Red-tailed Hawks fighting over Ruffed Grouse.

Bald Eagles, with young and nest.

Thrushes and Bluebirds in Mountain Ash tree. A winter scene in a Victoria garden.

North-west Coast Herons.

Group representing a section of Bare Island, Straits of Georgia. The birds included are: Tufted Puffins, Pigeon Guillemots, Glaucous-winged Gulls and Violet-green Cormorants, that were found nesting on Bare Island during June and July, 1908.

A case containing Albinos, viz.: Meadow Lark from Cornwall, B. C.; Crow, from Vancouver; Crow, from Masset, Queen Charlotte Islands; Crow, from Mayne Island; Crow, from Alberni, Vancouver Island; Crow, from Cache Creek, near Ashcroft; Robin, from Prospect Lake, near Victoria; Western Robin, from Victoria; Robin, from Cache Creek, near Ashcroft; a Loon or Great Northern Diver, from Ucluelet on the West Coast; and a freak Pheasant.

OOLOGY.

BIRDS' EGGS.

Western Grebe.

American Red-necked Grebe.

Horned Grebe.

Pied-billed Grebe.

Loon.

Macfarlane's Screech Owl.

Burrowing Owl.

California Pygmy Owl.

Belted Kingfisher.

Gairdner's Woodpecker.

BIRDS' EGGS.—*Continued.*

Tufted Puffin.	Flicker.
Marbled Murrelet.	North-western Flicker.
Pigeon Guillemot.	Western Nighthawk.
California Murre.	Rufous Hummingbird.
Glaucous-winged Gull.	Kingbird.
American Herring Gull.	Arkansas Kingbird.
Arctic Tern.	Western Wood Pewee.
Leach's Fork-tailed Petrel.	Western Flycatcher.
Violet-green Cormorant.	American Magpie.
California Brown Pelican.	Steller's Jay.
Mallard.	California Crow.
American Widgeon.	North-west Crow.
Green-winged Teal.	San Diego Redwing.
Canvas-back Duck.	North-western Redwing.
Lesser Scaup Duck.	Bullock's Oriole.
Ruddy Duck.	Western Meadowlark.
Canada Goose.	Gambel's Sparrow.
American Bittern.	Western Savanna Sparrow.
Sandhill Crane.	Nuttall's Sparrow.
Virginia Rail.	Western Chipping Sparrow.
Carolina Rail.	Oregon Junco.
American Cootie.	Rusty Song Sparrow.
Wilson's Snipe.	Sooty Song Sparrow.
Western Sandpiper.	Townsend's Sparrow.
Spotted Sandpiper.	Oregon Towhee Sparrow.
Long-billed Curlew.	Black-headed Grosbeak.
Killdeer Plover.	Louisiana Tanager.
Black Turnstone.	Purple Martin.
Black Oyster-catcher.	Barn Swallow.
Mountain Partridge.	Bank Swallow.
California Partridge.	Cedar Bird.
Sooty Grouse.	Cassin's Vireo.
Oregon Ruffed Grouse.	Orange-crowned Warbler.
Rock Ptarmigan.	Alaskan Yellow Warbler.
Band-tailed Pigeon.	Audubon's Warbler.
Mourning Dove.	Catbird.
Turkey Vulture.	Vigor's Wren.
Western Red-tailed Hawk.	Parkman's Wren.
Swainson's Hawk.	Western Winter Wren.

BIRDS' EGGS.—*Concluded.*

Pigeon Hawk.	Tule Wren.
Marsh Hawk.	Red-breasted Nuthatch.
American Sparrow Hawk.	Chestnut-backed Chickadee.
American Osprey Hawk.	Ruby-crowned Kinglet.
Golden Eagle.	Russet-backed Thrush.
Bald Eagle.	Olive-backed Thrush.
American Long-eared Owl.	Varied Thrush.*
Saw-whet Owl.	Western Robin.
Kennicott's Screech Owl.	Western Bluebird.

REPTILIA.

Pacific Terrapin, Mud Turtle (*Clemmys marmorata*, B. & G).
Mainland of British Columbia.

Pygmy Horned Toad (*Phrynosoma douglasii*, Bell).
Osoyoos.

Northern Alligator Lizard (*Gerrhonotus principis*, B. & G).
Shawnigan and Victoria.

Pacific Rattlesnake (*Crotalus lucifer*, B. & G).
Cache Creek, Ashcroft, etc. Not found on Vancouver Island.

Desert Gopher Snake (*Pituophis catenifer deserticola*, Stej).
Vernon.

Puget Garter Snake (*Thamnophis leptocephala*, B. & G).
Hatzic, Sicamous, Nelson and Vernon.

Northwestern Garter Snake (*Thamnophis parietalis pickeringii*,
B. & G).
Vancouver Island and Mainland.

Puget Garter Snake (*Thamnophis leptocephala*, B & G).
Vancouver Island and Mainland.

Wandering Garter Snake (*Thamnophis vagrans*, B. & G).
Victoria.

The Elegant Garter Snake (*Thamnophis elegans*, B. & G).
Sicamous.

Striped Snake (*Eutamia verticalis pambalis*).
There is also a small collection of Batrachia of British Columbia.

FISHES.

ORDER HYPEROTRETI.

FAMILY HEPTATREMIDÆ.

California Hagfish (*Polistotrema stouti*, Lockington).

The Hagfish fastens itself on the gills of large fishes, sometimes on the eyes, whence it works its way very rapidly into the inside of the body. It then devours all the flesh of the body without breaking the skin, so that the fish is left a mere hulk of head, skin and bones. Vancouver Island.

ORDER HYPEROARTII.

FAMILY PETROMYZONIDÆ.

Marine Lamprey (*Entosphenus tridentatus*, Gairdner).

Found in the tributaries of the Skeena River.

Brook Lamprey (*Lampetra cibaria*, Girard).

Cowichan River

ORDER CYCLOSPONDYLI.

FAMILY SQUALIDÆ.

Spiked Dogfish (*Squalus sucklii*, Girard).

Oak Bay, near Victoria.

ORDER BATOIDEI.

FAMILY RAJIDÆ.

The Skate (*Raja binoculata*, Girard).

The largest of our Skates, reaching a length of over six feet; the egg-case nearly a foot long. Abundant. Victoria, Race Rocks, Vancouver Island.



FISHERIES DEPARTMENT

ORDER CHIMAEROIDEI.

FAMILY CHIMÆRIDÆ.

Rat Fish (*Hydrolagus colliei*, Lay & Bennett).

Very abundant in cold waters at a moderate depth; rarely used as food. Victoria.

ORDER PLECTOSPONDYLI.

FAMILY CYPRINIDÆ.

Chub (*Mylocheilus caurinus*, Richardson).

Common on Mainland. Taken at Nanaimo on Vancouver Island.

Green's Chub (*Couesius greeni*, Jordan).

Taken in a small lake near Fort St. James.

Sacramento Pike (*Ptychocheilus oregonensis*, Richardson).

Richardson's Minnow (*Richardsonius lateralis*, Girard).

Victoria.

ORDER APODES.

FAMILY NEMICHTHYIDÆ.

Snipe Eel (*Nemichthys avocetta*, Jordan & Gilbert)

Clover Point; Beacon Hill, Victoria.

ORDER ISOSPONDYLI.

FAMILY CLUPEIDÆ.

Herring (*Clupea pallasii*, Cuvier).

Victoria.

California Sardine (*Clupanodon caeruleus*, Girard).

Alert Bay.

Shad (*Alosa sapidissima*, Wison).



SPRING SALMON (*Oncorhynchus tshawytscha*).

FAMILY ENGRAULIDIDÆ.

The Anchovy (*Engraulis mordax*, Girard).

Extremely abundant in large schools; one of the largest of our Anchovies, and the most valuable as food. Flesh comparatively dark and easily torn, as in a sardine.

FAMILY SALMONIDÆ.

River Whitefish (*Coregonus williamsoni*, Girard).

From Similkameen River. Common in rivers of the Mainland.

The Humpback Salmon (*Oncorhynchus gorbuscha*, Walbaum).**The Dog Salmon** (*Oncorhynchus keta*, Walbaum).

Cowichan.

Spring Salmon (*Oncorhynchus tshawytscha*, Walbaum).

Vancouver Island. Flesh red and rich in spring, becoming paler as the spawning season approaches; individuals of seventy to one hundred pounds have been taken. They move up the large streams in spring and summer, moving up without feeding, until the spawning season, by which time many of those which started first have travelled more than one thousand miles. It is by far the most valuable of our salmon.

Cohoe Salmon (*Oncorhynchus kisutch*, Walbaum).

Victoria. The Cohoe Salmon are more numerous than the Spring Salmon, and while of smaller size, generally, are just as game. Indeed, many anglers consider the Cohoe more game than the Spring Salmon. Trolling with rod and line in fresh and salt waters is the favourite method in use amongst anglers for catching Salmon in the Province.

Sockeye Salmon (*Oncorhynchus nerka*, Walbaum).

Victoria. This Salmon is one of the most graceful of the Salmonidæ, scarcely inferior to the Spring Salmon when fresh, but the flesh more watery.

Common Trout (*Salmo mykiss*, Walbaum).

Shawnigan Lake.



SOCKEYE SALMON (*Oncorhynchus nerka*)
COHOE SALMON (*Oncorhynchus kisutch*)

The Steelhead or Gairdner's Trout (*Salmo gairdneri*, Richardson).

The Steel-head is a large trout abounding in the mouths of the rivers, reaching the weight of 20 pounds or more, it is migratory like the Salmon and ascending the rivers fully as far; it is similar in quality as food to other trout. Very common in the Kootenay and Okanagan Lakes. As a game fish many anglers consider it the gamest fish taken in these waters. Fraser River and Nanaimo.

Kamloops Trout (*Salmo gairdneri kamloops*, Jordan).

This is a fine large trout and locally abundant; it is slender and graceful, somewhat different in appearance from the ordinary "Steel-head," but not distinguished by any technical character of any importance. Kootenay Lake.

Great Lake Trout (*Cristivomer namaycush*, Walbaum).

This fish reaches a weight of 60 to 100 pounds, averaging about 17. Its name, Namaycush, is an Indian one.

The Charr. Dolly Varden (*Salvelinus malma*, Walbaum).

This is one of the most beautiful and active of all the Salmonidæ. It is found in small mountain brooks.

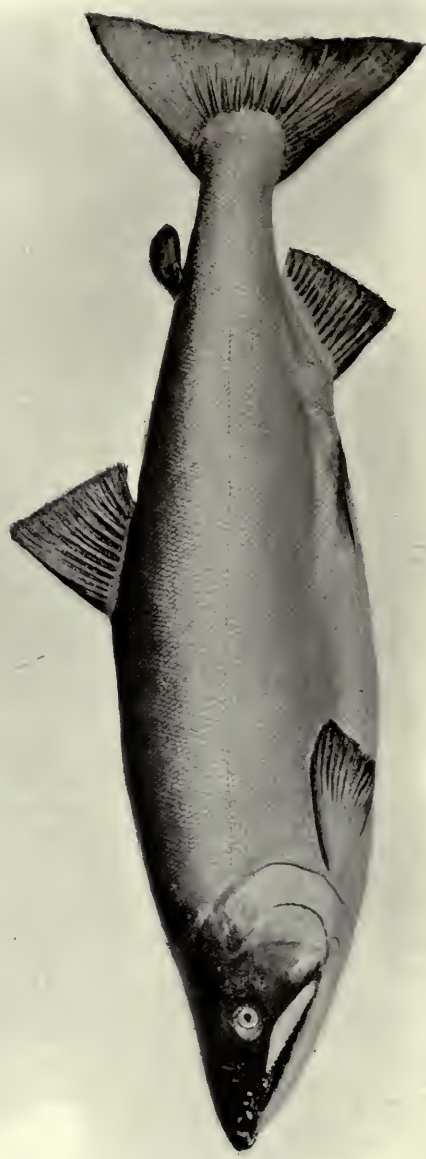
FAMILY ARGENTINIDÆ.

The Capelin (*Mallotus villosus*, Muller).

A delicious little fish, much valued in the far north. The eggs of the Capelin are deposited in sand along Arctic shores in incredible numbers. They are washed up on the beaches, and in about thirty days they are hatched. "The beach then becomes a quivering mass of eggs and sand," from which the little fishes are borne into the sea by the waves. Victoria.

The Oolachan or Candle Fish *Thaleichthys pacificus*, Richardson).

An excellent pan-fish, unsurpassed by any fish whatsoever in delicacy of flesh, which is far superior to that of the trout. The flesh is very oily, but the oil has a very attractive flavour. The Indians extract the oil and consider it a great delicacy when mixed with berries. It is sometimes extracted and used as a substitute for



HUMBACK SALMON (*Oncorhynchus gorbuscha*),
DOG SALMON (*Oncorhynchus keta*).

cod-liver oil. It is, however, solid and lard-like at ordinary temperatures. The fishes when dried have been used as candles. In the Fraser River and all rivers to the north of it.

Smelt (*Osmerus thaleichthys*, Ayres).

A species related to the Oolachan, and of similar flavour as food.

ORDER INIOMI.

FAMILY ALEPISAUROIDÆ.

Hand-saw Fish (*Alepisaurus borealis*, Gill).

Trail Island and Quatsino Sound.

ORDER HEMIBRANCHII.

FAMILY GASTEROSTEIDÆ.

California Stickleback (*Gasterosteus williamsoni microcephalus*, Girard).

Cowichan River.

FAMILY AULORHYNCHIDÆ.

Yellow Stickleback (*Aulorhynchus flavidus*, Gill).

ORDER LOPHOBRANCHII.

FAMILY SYNGNATHIDÆ.

Pipe Fish (*Siphostoma griscolineatum*, Ayres).

ORDER ACANTHOPTERI.

FAMILY AMMODYTIDÆ.

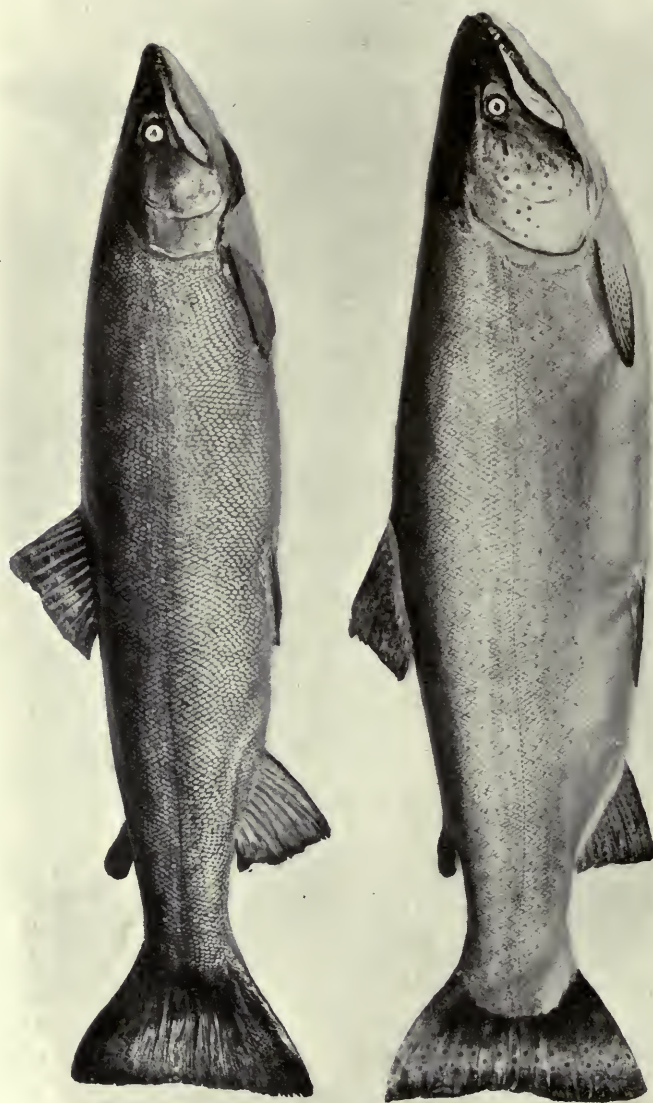
The Sand Launce (*Ammodytes personatus*, Girard).

An excellent pan-fish; the flesh delicious. It is very abundant; they live in large schools, burying themselves in the sand near the tide mark. Valued as bait, and useful as food for salmon and other large fishes.

FAMILY ZAPRORIDÆ.

Prow Fish (*Zaprora silenus*, Jordan).

Only two specimens known. Taken at Nanaimo and Victoria. The type is in the Provincial Museum.



STEELHEAD (*Salmo gairdneri*).
KAMLOOPS TROUT (*Salmo gairdneri kamloops*).

FAMILY TRICHODONTIDÆ.

The Sandfish (*Trichodon stelleri*, Cuvier & Valenciennes).

FAMILY HEXAGRAMMIDÆ.

Red Rock Trout (*Hexagrammos superciliosus*, Pallas).

Victoria.

Starry Rock Trout (*Hexagrammos decagrammus*, Pallas).

Victoria.

Blue Cod (*Ophiodon elongatus*, Girard).

Victoria.

Very abundant, reaching a weight of thirty to forty pounds, and one of the most important food fishes on the Coast.

Broad-fin Cod (*Zaniolepis latipinnis*, Girard).

Victoria.

Painted Cod (*Oxylebius pictus*, Gill).

Victoria. Abundant, but rare in collections, being seldom taken in nets. A most beautiful and active little fish.

FAMILY ANOPILOMATIDÆ.

Black Cod or Skil (*Anoplopoma fimbria*, Pallas).

From Cape Flattery to Queen Charlotte Islands.

FAMILY SCORPÆNIDÆ.

Jack Fish (*Sebastodes paucispinis*, Gill).

Black Sea Bass (*Sebastodes melanops*, Girard).

Victoria.

Red-sea Bass (*Sebastodes ruber*, Ayres).

Saanich

Striped-sea Bass (*Sebastodes nigrocinctus*, Ayres).

Saanich and Victoria.

Yellow-backed Rockfish (*Sebastodes maliger*, Jordan & Gilbert).

Victoria.



BONITA (*Sarda chilensis*)
(Type Specimen), PROW FISH (*Zaprora silenus*).

Red Rockfish (*Sebastes ruberrimus*, Cramer).

Victoria.

FAMILY SCLÆNIDÆ.

White Sea Bass (*Cynoscion nobilis*, Ayres).

Vancouver Island. A most valuable food fish, reaching a weight of eighty pounds; its flesh is firm and rich.

FAMILY STROMATEIDÆ.

California Pompano (*Palometa simillima*, Ayres).

Victoria.

FAMILY CENTRARCHIDÆ.

Small-mouthed Black Bass (*Micropterus dolomieu*, Lacépède).

FAMILY COTTIDÆ.

Cirrus Sculpin (*Blepsias cirrhosus*, Pallas).

Banded Sculpin (*Nautichthys oculofasciatus*, Girard).

Red Sculpin (*Hemilepidotus hemilepidotus*, Tilesius).

Victoria

Miller's Thumb (*Uranidea gulosa*, Jordan & Gilbert).

Shawnigan Lake.

Globe-headed Sculpin (*Oligocottus globiceps*, Girard)

Victoria.

FAMILY RHAMPHOCOTTIDÆ.

Richardson's Cottus (*Rhamphocottus richardsoni*, Gunther).

Victoria.

FAMILY AGONIDÆ.

Alligator Fish (*Podothecus acipenserinus*, Tilesius).

Victoria.

FAMILY LIPARIDIDÆ.

Stone Sucker (*Liparis pulchellus*, Ayres).

Green's Sucker (*Neoliparis greeni*, Jordan).



WHITE SEA BASS (*Cynoscion nobilis*).

FAMILY CYCLOPTERIDÆ.

Lump Sucker (*Cyclopterus spinosus*, Muller).

FAMILY BATRACHOIDIDÆ.

The Midshipman (*Porich thys porosissimus*, Culver & Val).

FAMILY BLENNIIDÆ.

The Crested Blenny (*Chirolophis polyactocephalus*, Jordan & Gilbert).

Alert Bay.

Ornamented Gunnel (*Muraenoides ornatus*, Jordan & Gilbert).

Yellow Butter Fish (*Apodichthys flavidus*, Girard).

Slimy Butter Fish (*Xiphister mucosum*, Jordan & Gilbert).

Snake Blennie (*Lumpenus anguillaris*, Pallas).

FAMILY CRYPTACANTHODIDÆ.

The Wry-mouth (*Delolepis virgatus*, Bean).

FAMILY ANARRHICHADIDÆ.

The Wolf-eel (*Anarrhichthys ocellatus*, Ayres).

Victoria. One of our most remarkable fishes. Rarely used as food. Feeds chiefly on Sea-urchins and Sand-dollars.

FAMILY ZOARCIDÆ.

The Eelpout (*Lycodopsis pacificus*, Collett).

FAMILY GADIDÆ.

The Burbot or Ling (*Lota maculosa*, Le Seur).

Common in fresh water on the Mainland.

The Cod (*Gadus macrocephalus*, Tilesius).

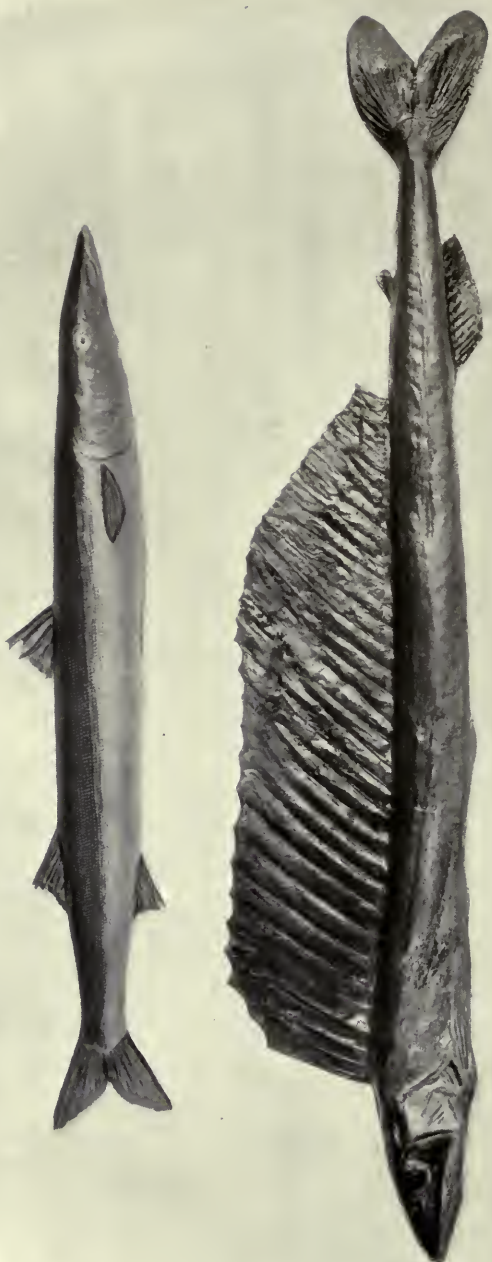
Victoria.

Tom Cod (*Microgadus proximus*, Girard).

Esquimalt.

FAMILY MERLUCCIIDÆ.

The Hake (*Merluccius productus*, Ayres).



CALIFORNIA BARRACUDA (*Sphyræna argenta*).
HAND-SAW FISH (*Alepisaurus borealis*).

FAMILY SPHYRÆNIDÆ.

California Barracuda (*Sphyræna argentea*, Girard).

A long and slender Barracudda, an important food fish, with flesh rich, firm and delicate.

Otter Point, Sooke.

FAMILY SCOMBRIDÆ.

Chub Mackerel (*Scomba colias*, Gmelin).

Nanaimo.

California Bonito (*Sarda chilensis*, Cuvier & Valenciennes).

Rivers Inlet and Victoria.

ORDER HETEROSOMATA.

FAMILY PLEURONECTIDÆ.

Arrow-toothed Halibut (*Atheresthes stomias*, Jordan & Gilbert).

Straits of Georgia.

Halibut (*Hippoglossus hippoglossus*, Linnæus).

Victoria. Largest of the flounders. This genus contains but one species, the well-known Halibut. Abundant on both coasts of the North Atlantic and of the North Pacific. It is found in all northern seas, southward in deep water to France. Taken with hook and line on all cod banks. Its flesh is pure white and of a delicate flavour, and when smoked forms a tempting morsel at the breakfast table.

The Sharp-nosed Flounder (*Pleuronectes vetulus*, Jordan & Gilbert).

The Starry Flounder (*Pleuronectes stellatus*, Pallas).

Victoria. This is one of the largest flounders, reaching a weight of fifteen to twenty pounds. Of the small-mouthed flounders it is much the largest species known. It is excellent food-fish, and from its size and abundance it is one of the most important of the group in the region where it is found. It lives in shallow water and sometimes ascends the largest rivers. It is one of the most widely distributed of all flounders.

The Sole, so-called (*Glyptocephalus zachirus*, Lockington).

This species is a thin, dry flounder reaching a length of something over a foot. It is taken in nets in deep water.

In one of the windows of the Fish Department is shown a series of Salmon eggs from the unfertilised egg to the perfect fish. The eggs are from the Harrison Hatchery, B. C.



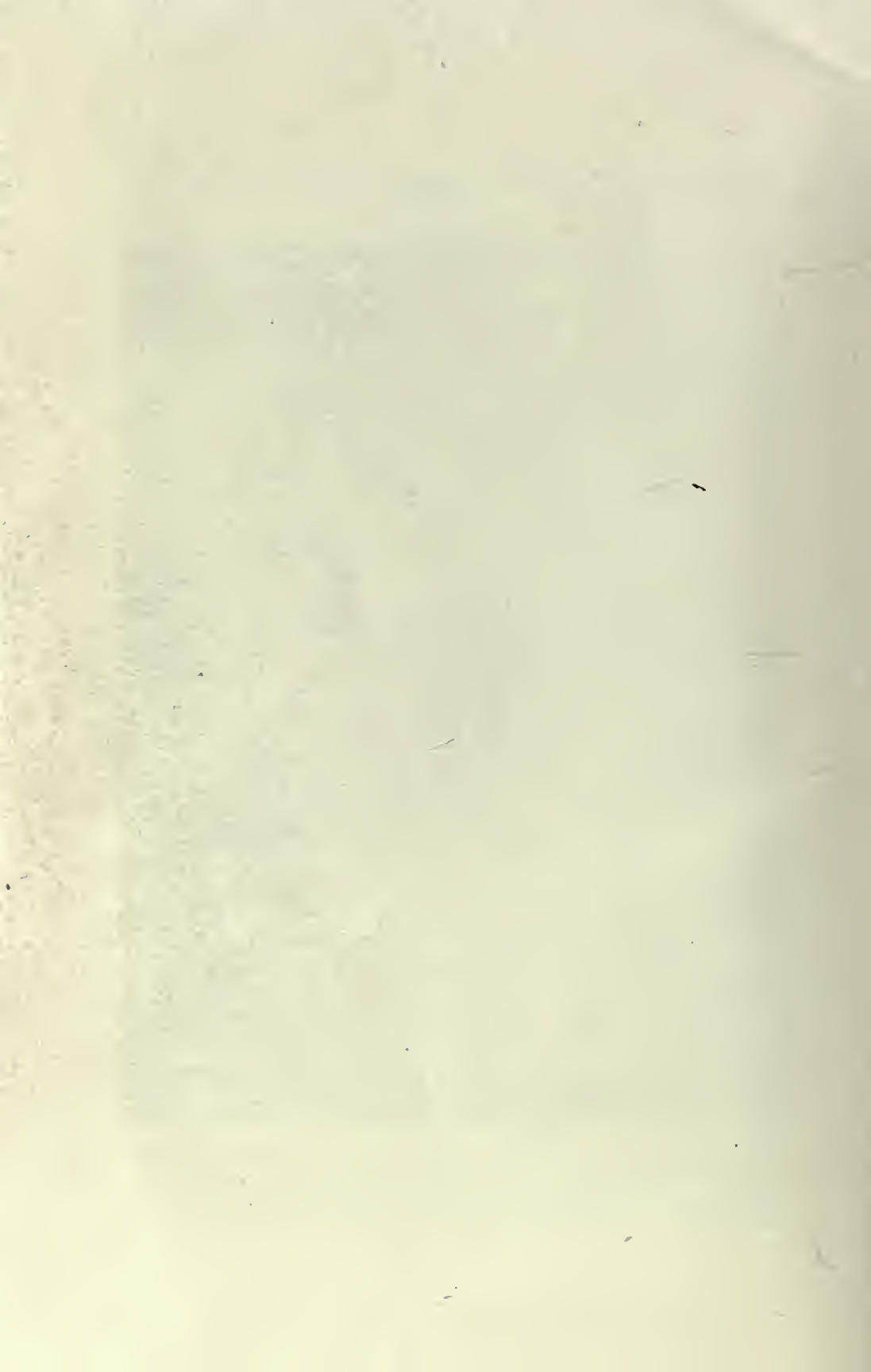
OSTEOLOGY IN PROVINCIAL MUSEUM.



KOOTENAY INDIAN FISHERMEN. (From "Game Fishes of British Columbia").



INDIANS CATCHING SALMON IN THE CANYON OF THE FRASER.
(From "Game Fishes of British Columbia").



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